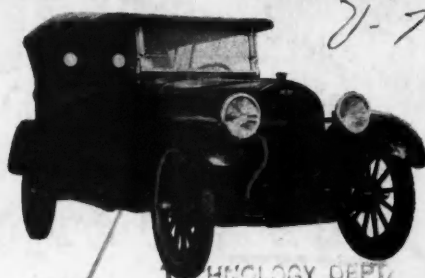


EXCLUSIVE---"With the Lincoln Team in Mexico"

MOTOR TRENDS

JANUARY 1955 25c



TECHNOLOGY DEPT.

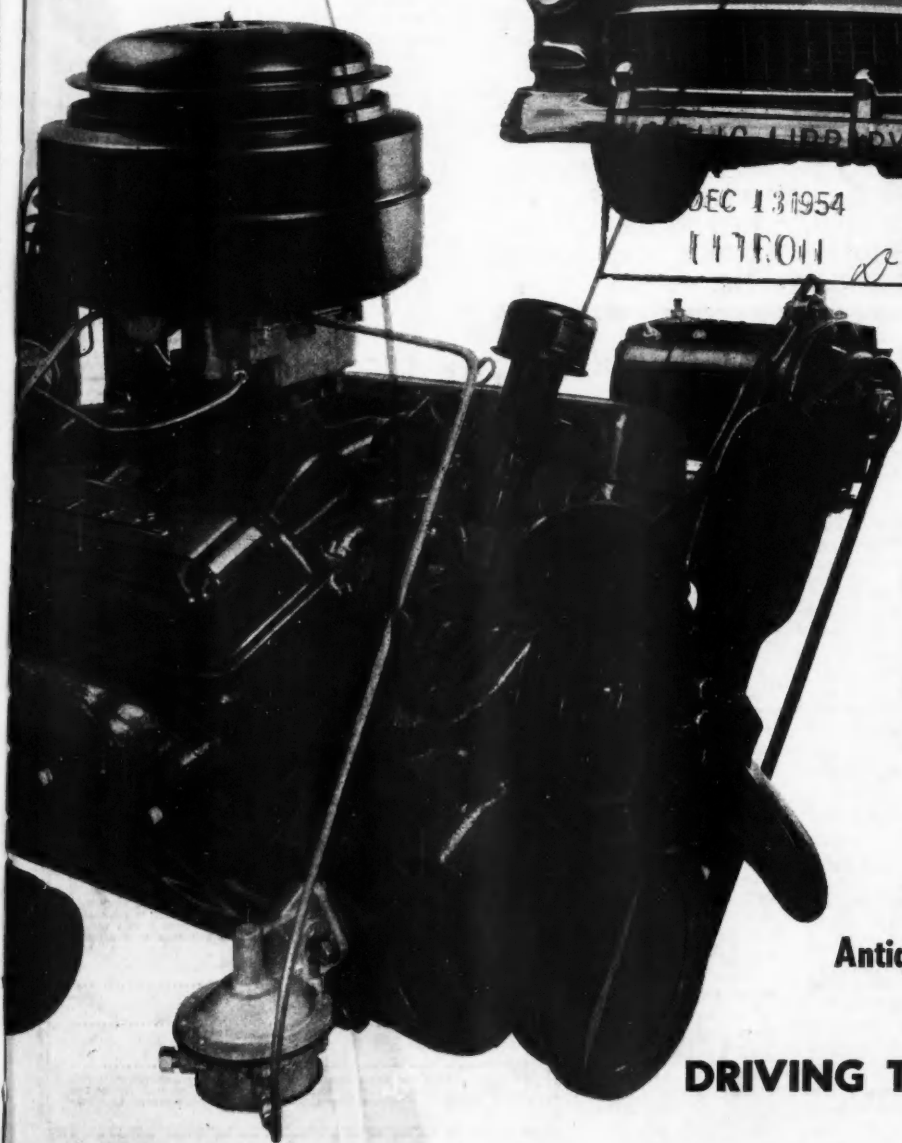


CHEVROLET
road test results
will startle you!

see page 22

Buying a Classic?
Antique? Any Unusual Car?

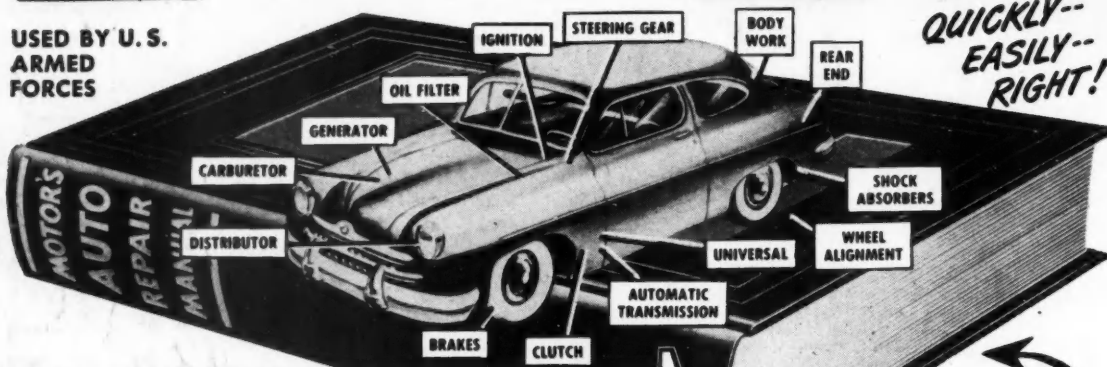
DRIVING THE NEWEST CARS



HOW TO FIX

Brakes, Clutches, Transmissions, Rear Ends, Carburetors—Yes, ANY PART OF ANY CAR

USED BY U. S.
ARMED
FORCES



QUICKLY--
EASILY--
RIGHT!

NOW—Whether You're a Beginner or an Expert Mechanic—You Can "Breeze Through" ANY AUTO REPAIR JOB! MOTOR'S BIG BRAND-NEW AUTO REPAIR MANUAL Shows You HOW—With 2950 PICTURES AND SIMPLE STEP-BY-STEP INSTRUCTIONS.

Free 7-DAY TRIAL
Return and Pay Nothing
If Not Satisfied!

COVERS EVERY JOB ON EVERY CAR BUILT FROM 1940 THRU 1954

YES, it's easy as A-B-C to do any "fix-it" job on any car whether it's a simple carburetor adjustment or a complete overhaul. Just look up the job in the index of **MOTOR'S New AUTO REPAIR MANUAL**. Turn to pages covering job. Follow the clear, illustrated step-by-step instructions. Presto—the job is done!

No guesswork! **MOTOR'S Manual** takes nothing for granted. Tells you where to start. What tools to use. Then it leads you easily and quickly through the entire operation!

Over 2,950 Pictures! So Complete, So Simple, You CAN'T Go Wrong!
BRAND-NEW REVISED Edition covers everything you need to know to repair over 685 chassis models. **ONE THOUSAND** giant pages. 2,950 "This-Is-How" pictures. Over 292 "Quick-Check" charts—more than 22,598 essential repair specifications. Over 225,000 service and repair facts. Instructions and pictures are so clear you can't go wrong!

Even a green beginner mechanic can do a good job with this giant manual before him. And if you're a top-notch

mechanic, you'll find short-cuts that will amaze you. No wonder this guide is used by the U. S. Army and Navy! No wonder hundreds of thousands of men call it the "Auto Repair Man's Bible"!

Meat of Over 140 Official Shop Manuals

Engineers from every automobile plant in America worked out these time-saving procedures for their own motor car line. Now the editors of **MOTOR** have gathered together this wealth of "Know-How" from over 140 Official Shop Manuals, "boiled it down" into

Same FREE Offer On MOTOR'S Truck and Tractor Manual

Covers EVERY job on EVERY popular make gasoline truck, tractor made from 1946 thru 1954. **FREE 7-Day Trial.** Check proper box in coupon.

crystal-clear terms in one handy indexed book!

Try Book FREE 7 Days

SEND NO MONEY! Just mail coupon! When the postman brings book, pay him nothing. First, make it show you what it's got! Unless you agree this is the greatest time-saver and work-saver you've ever seen—return book in 7 days and pay nothing. Mail coupon today! Address: **MOTOR Book Dept., Desk 501, 250 West 55th St., N. Y. 19, N. Y.**

Covers 685 Models—All These Makes

Buick	Ford	Nash
Cadillac	Frazer	Oldsmobile
Chevrolet	Henry J	Packard
Chrysler	Hudson	Plymouth
Crosley	Kaiser	Postiac
De Soto	Lincoln	Studebaker
Dodge	Mercury	Willis



Many Letters of Praise from Users
"MOTOR'S Manual paid for itself on the first 2 jobs, and saved me valuable time by eliminating guesswork."
—W. SCHROF, Ohio.

He Does Job in 30 Min.—Fixed motor another mechanic had worked on half a day. With your Manual I did it in 30 minutes.



—C. AUBERRY, Tenn.

MAIL COUPON NOW FOR 7-DAY FREE TRIAL

MOTOR BOOK DEPT.
Desk 501, 250 W. 55th St., New York 19, N. Y.

Rush to me at once (check box opposite book you want):

☐ **MOTOR'S New AUTO REPAIR MANUAL.** If O.K., I will remit \$2 in 7 days, \$2 monthly for 2 months and a final payment of 35c (plus 35c delivery charges) one month after that. Otherwise I will return the book postpaid in 7 days. (Foreign price, remit \$9 cash with order.)

☐ **MOTOR'S New TRUCK & TRACTOR REPAIR MANUAL.** If O.K., I will remit \$2 in 7 days, and \$2 monthly for 3 months, plus 35c delivery charges with final payment. Otherwise I will return book postpaid in 7 days. (Foreign price, remit \$10 cash with order.)

Print Name.....Age.....

Address.....

City.....State.....

☐ Check box and save 35c shipping charge by enclosing WITH coupon entire payment of \$6.96 for Auto Repair Manual (or \$8 for Truck and Tractor Repair Manual.) Same 7-day return-refund privilege applies.

Tech

NEW TYPE BATTERY makes 100,000 STARTS per MONTH month after month!

"TORTURE TEST"

by authorized member of American Council of Commercial Laboratories demonstrate amazing performance* of Life-Long—the only battery in the world with a TEN-YEAR BONDED GUARANTEE featuring free replacement or money back. These independent laboratory reports prove what you yourself will soon discover in your own car... that your Life-Long Battery gives you faster starts, a hotter spark, brighter lights, sure starts in any weather, ample power for extra electrical equipment.

*Let us send you details of these independent laboratory tests:

OVERCHARGE TEST... Life-Long exceeds SAE requirements by 400%, eliminating all possibility of burn-outs through overcharge.

R.P.M. TEST... Life-Long spins your engine 20% faster.

COLD TEST... Life-Long operates efficiently at 70 degrees below zero

HIGH TEMPERATURE TEST... Life-Long operates efficiently at blistering temperature.

10 YEAR Bonded Guarantee

BACKED BY GREAT WESTERN
ESCROW COMPANY
BOND

A Completely
Discharged
LIFE-LONG BATTERY
will Recuperate in
"ONE MINUTE"

*I will pay you \$1,000
if you can disprove this
claim!*

J. M. Watt
PRESIDENT
LIFE-LONG BATTERY MFG. CORP.

TRY IT!

Tremendous

RESERVE POWER

Insures You a TROUBLE-FREE BATTERY!

You insist on "reserve" horsepower in your motor. You need extra emergency power in your battery, too, as insurance against costly, embarrassing battery failure. You get that reserve power with Life-Long—the only battery backed by a 10-year Bonded Guarantee.

LIFE LONG

Large corporations, Fire Departments, Police Departments, Taxicab Companies in every part of the country, as well as the U.S. Government and many foreign countries are now buying LIFE-LONG BATTERIES. LIFE-LONG manufactures a complete line of Industrial, Commercial, Marine and Motor-cycle batteries. Prices on request.

COSTS NO MORE

You Can Now Buy a LIFE-LONG TEN-YEAR BATTERY for less than the cost of an ordinary lead acid battery. Look at the money you save!

All 6-volt

LIFE-LONG AUTO BATTERIES—\$29.95

All 12-volt

LIFE-LONG AUTO BATTERIES—\$34.95

A so-called "First Quality" three-year

battery costs you \$10.00 a year.

A LIFE-LONG TEN-YEAR BATTERY

costs you only

\$3.00 a year.

With your Ignition switch off and your headlights on, step on your starter until the battery is so run down that it won't start the engine or light the lights. Now wait one minute with headlights off—then step on the starter. The LIFE-LONG BATTERY will start your car instantly with a surge of power that it has regained during that brief 60-second interval! Make this test as many times as you like! One LIFE-LONG dealer has demonstrated this amazing recuperative ability of LIFE-LONG BATTERIES over 500 times with the same battery, with no sign of weakening, yet!

IF NO DEALER NEAR YOU, USE COUPON

**Reader's
Digest**

Ask your Life-Long dealer for a free copy of a Reader's Digest article entitled "The U.S. FINALLY DISCOVERS THE LIFE-TIME BATTERY."

BUY NOW! UNDER MONEY-
BACK GUARANTEE

DISTRIBUTOR TERRITORY OPEN

Life-Long Batteries, sold all over U.S. and abroad, are protected by exclusive patents. Some territories are still open for men who recognize this big profit opportunity. Write for details.

LIFE-LONG BATTERY MFG. CORP., DEPT. MT-1
11766 W. Pico Blvd., Los Angeles 64, California

Please ship Life-Long Battery, 10-year guarantee:
6 volt automotive battery (\$29.95 including tax)
12 volt automotive battery (\$34.95 including tax)

for _____
Make & Model, Year of Car
Cash, check or money order enclosed. Life-Long pays
all delivery costs to your door.

Name _____

Address _____

City _____ Zone _____ State _____

Be Ready for COLD Weather!

Get
Your



SPORTS CAR HEATER NOW!

Cold weather can't make you shiver if you equip your MG now with an Arnolt 12-volt heater. It provides the right flow of warm air for any occasion. Complete with fittings for easy installation.

8044/TF 1500 (For the new 1955 MG) \$34.95
8044/TF 34.95
8044/TD 29.95

VOKES OIL FILTERS completely trap all impurities and provide real protection for your engine.

8180-MGL-Complete \$9.50

All shipments parcel post prepaid. Prices include Federal Excise tax. Write for details and name of nearest Accessories dealer!

Autocessories, Ltd.
WARSAW, INDIANA
DIVISION OF
ARNOLT CORPORATION

See

ARNOLT

for sales and service on



Britain's Luxurious
Family Car

MORRIS
and

The Famous
Economy Car



World's Most
Popular Sports Car



S. H. ARNOLT, INC. Distributors

Retail Sales: 153 East Ohio Street

Offices and Service: 415 East Erie Street

Telephone Michigan 2-5436

ASTON MARTIN • HILLMAN • HUMBER • RILEY
ROVER • NARDI • SUNBEAM (Alpine and Talbot)

ARNOLT-BRISTOL and

The ARNOLT Family Sports Car

Are Sold and Serviced by

S. H. ARNOLT, INC., CHICAGO

JANUARY 1955

Published Monthly

VOL 7 • NO. 1



THE CAR OWNERS MAGAZINE

on the '55 cars

"Spotlight on Detroit"

MERCURY	10
BUICK	12
RAMBLER	13
CADILLAC	14
OLDSMOBILE	16
WILLYS AND KAISER	18
MIGHTY MITE	48

"Driving Around"

MERCURY	52
LINCOLN	52
OLDSMOBILE	54
CADILLAC	54
BUICK	55
FARINA CADILLAC	55

road test

'55 CHEVROLET V8 TWO-TEN	Walt Woron	22
--------------------------	------------	----

features

'55 CANADIAN CARS	24
THANON SPECIAL	25
WITH THE LINCOLNS IN MEXICO	Pete Molson 26
DO IT YOURSELF—REPAIRING TUBELESS TIRES	Jim Lodge 30
WHAT WOULD YOU DO?	Bob Fendell 32
INTERNATIONAL MOTOR REVUE (CUSTOMS)	Jim Lodge 35
COMPETITION-BRED SPORTS CAR (KURTIS)	Lester Nehamkin 38
YOUR GUIDE INTO THE OLD CAR MARKET	Robert J. Gottlieb 42
THE NEW V8 ENGINES FOR 1955	46
DRIVING AROUND WITH WALT WORON	52

departments

EDITORIAL	5	CLASSIC COMMENTS	42, 62
GLOVE COMPARTMENT	6	TECHNICAL SERVICE	50
LETTERS	8	MOTOR MELANGE	60
SPOTLIGHT	10	WHAT'S YOUR IDEA?	64
CAR OWNER'S LIBRARY	20	SELL 'N' SWAP	65
EUROPEAN NEWSLETTER	40	MOTORING TRENDS	68

EDITOR — Walter A. Woron

PUBLISHER — R. E. Petersen

Managing Editor.....James E. Potter
Art Director.....Albert H. Isaacs
Asst. Managing Editor.....Pete Molson
Detroit Editor.....Don MacDonald
Associate Editor.....Jim Lodge
Asst. Art Director.....Don Fell
Technical Editor.....Fred Bodley
European Editor.....Gunther Molter
Classic Car Editor.....Robert J. Gottlieb

General Manager.....Lee Ryan
Business Manager.....Ted Johnson
Circulation Manager.....Gordon Behn
Advertising Coordinator.....Jack Preston
Advertising Manager.....Jim Going
Advertising Production.....Ed Mitchell
Photographers.....R. D'Olivo, T. Madley
Production.....Charles Glover
Technical Board Advisor Doug Moreton

MOTOR TRENDS, U. S. Copyright 1955 by Trend Inc., 5959 Hollywood Blvd., Los Angeles 28, California. Phone Hollywood 2-3561. Entered as Second Class Matter at the post office at Los Angeles, California. Canada: all other countries: one year—\$4.00; two years—\$7.00. Single copy 25c. On sale at newsstands throughout the country. CHANGE OF ADDRESS: Three weeks' notice is required. When requesting a change, please name magazine and either furnish an address imprint from a recent issue, or state exactly how label is addressed. Change cannot be made without the old as well as the new address. ADVERTISING: Advertising Sales Men—Jim Going, 5959 Hollywood Blvd., Los Angeles 28, California. Midwest Advertising—Joseph Jagolin, 3107 Oak Blvd., Detroit 26, Michigan. Phone Woodward 3-8640. Eastern Advertising—Ben LaMaster, 550 Fifth Ave., New York 36, N. Y. Phone Circle 8-1355. Closes 40 days preceding publication date. (See SRDS) CONTRIBUTIONS: Should be mailed to 5959 Hollywood Blvd., Los Angeles 28, Calif. They must be accompanied by return postage and we assume no responsibility for loss or damage thereto. Any material accepted is subject to such revision as is necessary to meet the requirements of this publication. Upon acceptance, payment will be made at our current rate, which covers all author's and/or contributor's right, title, and interest in and to the material mailed including but not limited to photos, drawings, charts and designs, which shall be considered and the material mailed including but not limited to photos, drawings, charts and designs, which shall be considered and the material is original and in no way an infringement upon the rights of others. Printed in U.S.A. by Pacific Press Inc., Los Angeles, California.

Motor Trend

EDITORIAL

Driving Impressions Aren't Road Tests

INTEGRITY IN NEWS REPORTING is something that we at MOTOR TREND take pretty much for granted. We go along with the unwritten, generally accepted (and little-publicized) code of news reporters and publishers in believing that news should be printed—but not if it hurts either whom it is about, or our readers.

So we give you the facts about things *as we see them, when we see them*. If MOTOR TREND distorts a fact, it's as unintentional as cutting off a finger. Furthermore, our long-time readers know that we're never afraid to stand up and say so when we've been wrong. We're old enough to admit our mistakes.

The past two months have brought more concentrated news for car buyers than they've had since cars began. To get a brief impression of a completely new '55 car and interpret it so others will believe it's a full-scale road test is inexcusable. This we will never do. We should be most happy to report that all other magazines in the same field took the same stand; unfortunately, it is not the apparent policy of one of our contemporaries. In giving you our *impressions* of the new cars, we drive them for a couple of hours, sometimes for a day, and in rare instances, on two-day trips. We could expand those few figures we record, take the rest provided by manufacturers' own proving ground checks, then wrap up the whole ball of wax, calling it a *road test*. We might fool some of our readers, but as Lincoln so aptly put it, "... you can't fool all of the people all the time." And would *you* like it? Wouldn't you always wonder when we might fool you again? We think that such a policy is bound to backfire; and the noise it makes will not be pleasant.

In this issue you will find, in addition to our *plainly labeled* impressions of the newest '55 cars, our second complete road test of the model year. (The first was on the Studebaker President, in the December issue.) We lived with the new Chevrolet in Detroit for 10 days, driving it on city streets, over Michigan's highways, on dirt backroads. We tested it under all conditions—in sunny weather, in rainstorms, in snow.

It takes time to compile test data as complete as you'll find on page 22. It *can't be done* (if you do it yourself) in any other way than by living with the car. Manufacturers, particularly in so newsworthy a year as this, are so hush-hush about their new products that up until the last week before announcement times, they will not allow their cars to be seen on city streets. Furthermore, cars cannot be tested on proving grounds *by other than proving ground personnel* on anything approaching the scale required for a *complete road test*.

We have done our best to give you the facts. The decision on which kind of reporting you prefer is up to you.

—Walt Woron

MOTOR

TREND Subscription Dept.

5959 Hollywood Blvd., Los Angeles 28, Calif.

Please enter my name as a MOTOR TREND subscriber for:

☐ One year—\$3.00 ☐ Two years—\$5.00 Above rates for U.S., its possessions, Canada, all other countries:
☐ One year—\$4 ☐ Two years—\$7

Name

Street

City Zone State

I enclose: ☐ cash ☐ check ☐ money order

Convenient delivery

is one of the big reasons for subscribing to MT. Another is the

\$1.00 Saving

on a two-year order. You won't miss a copy of the great new issues coming up if you send this coupon today...

FLY for LESS



NEW DC-6B

AIR COACH SERVICE

LOWEST AIRCOACH FARES

\$80 COAST TO COAST—\$72 RETURN
BETWEEN **CALIFORNIA** — **NEW YORK**
WASHINGTON, D. C.

NON-STOP
CHICAGO—CALIFORNIA \$67⁵⁰

NON-STOP
CALIFORNIA—DALLAS —\$49

DALLAS—NEW YORK —\$56
ALL FARES PLUS TAX

LOW FARES TO OTHER PRINCIPAL CITIES

- 500,000 Satisfied Passengers
- Dependable On-Time Flights
- Billion Passenger Miles
- Perfect Safety Record
- Fly Now—Pay Later

America's Largest Aircoach System

NORTH AMERICAN AIRLINES

NEW YORK 1441 BROADWAY Jldson 6-2100
CHICAGO 7 W. WASHINGTON ST. ANdover 3-0700
LOS ANGELES 623 S. OLIVE ST. TRinity 0711
SAN FRANCISCO 240 POWELL ST. Garfield 1-4050
DALLAS 1416 COMMERCE ST. STerling 5166
MIAMI 310 E. FLAGLER ST. 9-8321

"HOW I MADE MY HOBBY PAY OFF!"
I've always been interested in cars, then one day I met Joe...

Hi, Joe... LOOKS LIKE YOU HAVE THE LOCAL REPAIR BUSINESS ALL SEWED UP!

IT'S PART OF THE TERRIFIC AUTO-MECHANICS COURSE I'M TAKING—I EARN WHILE I LEARN!

NATIONAL SCHOOLS has a brand-new Shop-Method Training course—you learn at home, in your spare time. Every repair step fully explained and illustrated... Diesel too! Many students work on neighborhood cars—start part-time earnings after first few weeks!

SOUNDS GREAT BUT ISN'T IT A TOUGH FIELD TO CRACK?

NOT WHEN NATIONAL SCHOOLS PUTS THE FACTS IN YOUR HEAD, AND THE SKILL IN YOUR HANDS!

55 MILLION VEHICLES NOW OPERATING—trained men urgently needed in high-paying Automotive-Diesel and Allied Mechanics industries. "Shop-Tested" lessons cover latest equipment. **DRAFT AGE?** Our training helps you get higher ratings, better pay!

SEE THIS HANDY KIT OF TOOLS? ALL INCLUDED AS PART OF MY NATIONAL SCHOOLS TRAINING.

WHAT A DEAL! THIS AUTO MECHANICS COURSE IS FOR ME, TOO!

WE GIVE YOU THE TOOLS OF YOUR TRADE. Yours to keep during your lifetime future in garage and fleet work, your own business, customizing, and other important branches. Coupon below brings you famous Illustrated Free Book and Free Lesson—no obligation!

APPROVED FOR G. I. TRAINING

GET VALUABLE FREE BOOK AND FREE LESSON TODAY!

Job Placement Assistance, too!



NATIONAL SCHOOLS

Technical Trade Training Since 1905

LOS ANGELES 37, CALIFORNIA

In Canada: 811 West Hastings Street, Vancouver, B. C.

BOTH RESIDENT AND HOME STUDY COURSES OFFERED

MAIL NOW TO OFFICE NEAREST YOU!

(mail in envelope or paste on postal card)

NATIONAL SCHOOLS, Dept.

77-15

4000 S. FIGUEROA ST.
LOS ANGELES 37, CALIF.

OR

323 W. POLK ST.
CHICAGO 7, ILL.

Please rush FREE AUTO-MECHANICS BOOK & FREE LESSON. No obligation, no salesman will call.

NAME _____ BIRTHDAY _____ 19__

ADDRESS _____

CITY _____ STATE _____

☐ Check if interested **ONLY** in Resident Training at Los Angeles. **VETERANS.** Give date of discharge _____

Glove Compartment

SEVEN CHANGES IN YOUR FUTURE NEW CAR were outlined by several surgeons in a discussion on prevention of auto injuries during a meeting of the American College of Surgeons early in November:

Seats fixed so firmly to the car frame that they can withstand sudden stops equal to 40 times the pull of gravity.

Retractable seat belts fixed to the new firmer seats. Until then, seat belts fixed to the car frame itself.

Steering columns which telescope downward under impact, to avoid their becoming "a spear aimed at the heart."

Doors like airplane doors, with latches that won't let them fly open.

A crash panel of four-inch-thick foam material on the dashboard.

No sharp projections, such as instruments or rear view mirrors.

A front almost 2½ feet thick, made of something like aluminum foam which would crumple slowly, absorbing the shock of a crash.

SPORTS CAR RACING FILMS seem to have come into their own. Recently released was another such movie: 20th Century-Fox's "The Racers." The movie features such well-knowns as Kirk Douglas, Lee J. Cobb, Gilbert Roland, Cesar Romero, and Katy Jurado in a story of an Italian ex-bus-driver turned sports car racer. He competes against the finest manufacturers and drivers in the world in a number of races including the Mille Miglia, Le Mans, and the Italian Grand Prix.

The show is full of the excitement of the big European races.

THOSE OF YOU who have driven without an accident year after year have probably wondered why your automobile insurance doesn't cost you less than it does the driver who has had several accidents. And most of you probably would like to know why your automobile insurance costs so much in the first place.

The reasons behind the increased cost of insurance have been studied and analyzed by many authorities, who generally agree on these principal causes:

1. **Increased number and seriousness of accidents.** More and more automobiles traveling at high speeds on roads and highways that are often woefully inadequate.
2. **Increased cost of parts and labor.** As parts and labor go up, claims go up in cost. And when claims go up, premiums must be increased to meet them.
3. **Increased amount of work involved in repair jobs.** What used to be a simple

fender dent repair job may now involve replacing the entire side of an automobile. This, too, is added to the claim bill.

4. **Increased cost of claim settlements.** The average cost per claim (including out-of-court settlements as well as judgments from jury verdicts) has risen steadily. Jury awards may sometimes be more liberal than the facts of a case justify. As such costs go up, premiums must go up to make sure there is enough money to pay the claims.

To penalize the accident-free driver for someone else's accidents did not seem fair to the Zurich-American Insurance Companies of Chicago, and so they created a "merit rating" plan. This plan gives recognition to the safety record of the insured and at the same time provides sound protection, prompt and fair claim handling, and hometown agency service. Applicable only for the private passenger automobile, the plan is now in effect in 39 states and the District of Columbia.

Briefly, it consists of the following: a 15 per cent reduction in premium for bodily injury, property damage, and medical payments coverages if the driver and members of his family who drive his car have had no accidents during a 12-month experience period; standard (or "manual") rates for the driver with one accident; a 25 per cent increase for two accidents; and a 50 per cent increase for three or more. A comparable schedule of credits and debits applies to the physical damage coverages—comprehensive (fire, theft, etc.) and collision.

These credits for safe driving make the Zurich rates (and those of the Indemnity Company of North America which has a similar plan) more nearly competitive with the cheap rates of the mail-order-type insurance company. However, the Zurich and Indemnity Co. are first-line companies, recognizable by their readiness to pay legitimate claims promptly and without quibbling. First-line companies are easily distinguishable from second-rate ones; they pay *legitimate* claims with the same grace that they accept your check for the premium.

WILBUR SHAW, ONE OF AMERICA'S finest and most famous race drivers, was killed October 31. As is almost always the case with someone who led a very dangerous life as an everyday occupation, he died under completely different circumstances—in a plane crash.

Three-time winner of the Indianapolis 500-mile classic, he became President of the Indy Speedway in 1945. He started his racing career in 1927 and in '37, '39, and '40 won first place in the "500." In 1933, '35, and '38, he came in second; in '27 he was fourth; and in '36 was seventh. He was the leading money winner at Indy with a total of \$91,300 until Bill Vukovich won for the second time last May 31.

His fatal crash occurred the day before his 52nd birthday. He was in a privately owned plane returning from Detroit, where he had just driven a '55 Chrysler for a report in one of his regular articles in *Popular Science*.
—The Editors

Motor Trend

January



THE Mallory *M. Mallory* DISTRIBUTOR



THOUSANDS OF CAR AND TRUCK OWNERS HAVE INSTALLED MALLORY DISTRIBUTORS . . . MANY OWNERS HAVE FOUND IT MORE ECONOMICAL TO INSTALL A COMPLETELY NEW MALLORY DISTRIBUTOR, INSTEAD OF RE-BUILDING THEIR OLD DISTRIBUTOR, OR INSTALLING NEW PARTS IN AN ATTEMPT TO ADD THE MALLORY FEATURES . . . THE OWNER DOES NOT NECESSARILY HAVE TO BUY A NEW COIL; AND IF HE LATER DESIRES A MALLORY COIL OR A MAGSPARK TRANSFORMER, HE CAN ADD EITHER OF THEM TO HIS MALLORY DISTRIBUTOR . . . YOUR CAR OR TRUCK CAN BE "MALLORY EQUIPPED" FAR CHEAPER THAN YOU THINK . . . ASK YOUR DEALER, OR WRITE TODAY FOR FULL INFORMATION AND PRICES.

Advanced Features and Advantages of Mallory Distributors

1. MALLORY DUAL STABILIZED CIRCUIT BREAKERS decrease contact surface resistance as much as 50% and increase coil saturation time as much as 15%. The Mallory Stabilized Circuit Breakers greatly reduce circuit breaker bounce and chatter at high speed.

2. MALLORY VACUUM ADVANCE—With the Mallory Vacuum Advance a stationary circuit breaker plate is used which eliminates the trouble encountered with the conventional vacuum advance using a movable circuit breaker plate. In the Mallory system, the vacuum advance is accomplished entirely by a vacuum-operated piston brake which advances the entire governor mechanism. This feature gives a very rapid vacuum advance necessary for economy at light load and cruising speed and, at the same time, quickly nullifies the vacuum advance to prevent spark knocks when the throttle is suddenly opened. Moreover, with the stationary circuit breaker plate used in Mallory distributors, the spark always occurs when the distributor rotor registers perfectly with the distributor segment; and with the stationary plate, the dwell, or gapping of the contact points, cannot vary as is the case with the movable plate.

3. MALLORY DISTRIBUTOR CAP—The Mallory Distributor Cap used on all Mallory Distributors is waterproof! When the wires are installed in the distributor cap and the distributor cap cover is locked in place, the wires become a part of the distributor cap and are sealed completely from outside moisture and dust. The segments of the distributor cap are located in the roof of the distributor cap instead of at the sides. The gap between the end of the rotor sweep and distributor segments is very small because the rotor sweep is held against a track in the roof of the distributor cap. This small gap greatly reduces the electrical resistance between the distributor and spark plugs.

4. MALLORY COMPENSATING CENTRIFUGAL GOVERNOR—All Mallory Distributors have a compensating centrifugal governor which insures perfect engine timing at the right rpm! The compensating governor can be adjusted for any particular engine. When modifications have been made in the engine (such as a higher compression ratio) it is necessary to alter the advance curve in the distributor for maximum performance and economy. This can easily be done by adjusting the compensating governor in the Mallory Distributor.

MALLORY ELECTRIC CORPORATION • 12416 Cloverdale Ave. • Detroit 4, Mich.

BARGAINS! BARGAINS! BARGAINS!

SENSATIONAL

FREE TRIAL OFFERS!

THOUSANDS OF AMAZED CUSTOMERS SAY...

"TERRIFIC!"

SEND NO MONEY!

PAY POSTMAN NOTHING!

Surplus Gale Hall Engineering automotive instruments, all brand new, all in original cartons! Now — for a limited time only — we're slashing the prices right down to rock-bottom! AND, we want you to TRY THESE FAMOUS INSTRUMENTS AT OUR RISK! SEND NO MONEY NOW — test them for SEVEN FULL DAYS — then send payment or return merchandise! EVERY GAUGE FULLY GUARANTEED — real professional quality at savings that can't be duplicated!

1. JETMATIC COMPRESSION TESTER
ultra-sensitive movement, 0-300 lb. pressure, stub-type handle, built-in release, 4-color dial, 3 3/4" diameter. Formerly \$7.50. NOW \$2.98

2. TESTMASTER SENIOR COMPRESSION TESTER
full-size non-corrosive movement, built-in release valve, direct-reading 4-color dial, 5 1/4" dia. Formerly \$13.75. NOW \$4.98

3. TESTMASTER JUNIOR COMPRESSION TESTER
same as above, 4 1/4" dia. Formerly \$10.75. NOW \$3.98

4. COMBINED ENGINE ANALYSIS VACUUM GAUGE & FUEL PUMP TESTER
High-quality DUAL-PURPOSE instrument. Full-size movement — direct-reading dial! A terrific value! 5" dia. was \$11.70. NOW \$4.55

5. COMBINED ENGINE ANALYSIS VACUUM GAUGE & FUEL PUMP TESTER
same as above, 3 1/2" dia. Formerly \$8.10. NOW \$3.98

6. "TEST X" PNEUMATIC ENGINE TESTER
Compressed air (from any gas station air pump) does the work! 3-color dial, 4" diameter. Detects leaks in valves, rings, gaskets, cylinder head, etc. Complete cylinder analysis at a glance!

to air pump Dealer's price was \$8.75
NOW \$2.98

FREE! WITH ALL OF THE ABOVE — GIANT PROFESSIONAL WALL CHARTS — \$1 — \$1.50 VALUES — ABSOLUTELY FREE!

FAMOUS GALE HALL MILE-O-METERS AT DRastically REDUCED PRICES!

Shows miles per gallon as you drive — tells engine condition at all times — warns when adjustments are needed to avoid breakdowns! Essential for tune-up! Fits all cars. Mounts permanently on dash (no holes to drill).

ALL ACCESSORIES AND INSTRUCTION BOOKLET INCLUDED FREE!

7. STANDARD MODEL, 2 1/2" dia. — advertised at \$9.75. NOW ONLY \$4.55

8. STANDARD MODEL, 2 1/2" dia., illuminated for night driving — was \$9.95. NOW ONLY \$4.98

9. DELUXE MODEL, 3 3/4" dia. — advertised at \$14.75. NOW ONLY \$6.98

10. DELUXE MODEL, 3 3/4" dia., illuminated for night driving — was \$14.95. NOW ONLY \$7.55

(NOTE — ALL PRICES PLUS 40¢ POSTAGE AND HANDLING FOR EACH ITEM)

Order as many as you like! YOU CAN'T LOSE! EXTRA! VALUABLE "SURPRISE" GIFT FREE with all purchases over \$10!

ORDER TODAY

WOW! These free trial values are terrific! Send me all the instruments whose numbers I've circled below — after 7 days, I'll send payment or return items!

1 2 3 4 5 6 7 8 9 10

Name _____

Address _____

City _____ State _____

NEW ENGLAND SURPLUS SALES CO.

DEPT. MT-13 NEWBURYPORT, MASS.



ACCURATE REPORTING

Dear Walt:

Bought a new Triumph TR-2 largely on the strength of your write-up in MOTOR TREND. Crazy about that car.

Had never seen one nor had I ever ridden in anything but Detroit ions.

Thought I'd let you know how much I dote on your accurate reporting. I had it bought before I had seen it.

Dr. Merritt W. Terrell
Cambridge Springs, Pa.

A ROAD TEST THAT ISN'T!

November 11, 1954

Gentlemen:

This is to reassure you that MOTOR TREND will be given a chance to road test our completely new 1955 Chrysler Corp. passenger cars at the earliest opportunity.

It has come to our attention that a current issue of a magazine in your field contains an article which describes a road test of the 1955 Plymouth as by that publication's "test staff."

To our knowledge there have not yet been any road tests of the new Plymouth cars other than those carried on in the regular testing program of our own engineers at the Chrysler Corp. Proving Grounds.

Frank E. Kenesson, Manager
Press Information Service
Chrysler Corp.

A complete road test of the '55 Plymouth will appear in our February issue. For more on the above subject, see our editorial, page 5.—Editor.

WHAT IS "SANE" DRIVING?

Gentlemen:

I take exception to the editorial, "Why This Traffic Bottleneck?" by Walt Woron, and want to defend the sane driver as opposed to the offending slow driver.

I don't believe that sane driving necessarily falls in the same category as slow driving. Too many accidents are blamed on slow drivers instead of on those of the super-hopped-up cars that put on 90 miles an hour to save 10 minutes. I'm not trying to be a crusader, but want to speak up against the super hot-rodgers who endanger the lives of all sane drivers, just because they want to show off!

M. J. Planovsky
Edwards, Calif.

We weren't defending "speed demons"; we simply objected to slow drivers in fast lanes — this can only lead to trouble and isn't really "sane" driving.—Editor.

PROOF OF ECONOMY

Gentlemen:

In the October 1953 issue of MT you tested seven economy cars. We bought a Triumph Mayflower. I have kept a record of expenses and thought perhaps you would like to see it.

	Cost
Gas—275.5 gallons used	\$ 75.92
Lubrication oil, grease, etc.	21.20
Repairs	5.80

Total expenses for one year \$102.92

We have driven a total of 8768 miles and averaged a little better than 31 miles to the gallon of gas since we bought the Triumph.



We have taken several trips around Florida, driving the Triumph rather than our full-sized car, which, incidentally, is a Lincoln.

Needless to say, we are very happy with the "Flower," as we have nicknamed it, and would recommend one for a second car for someone who doesn't want to spend a small fortune on gas, etc.

Richard Oblinger
St. Petersburg, Fla.

POWER SPIN-OUT TECHNIQUE

Gentlemen:

How about having one of your testers write a safe driving article particularly covering "power" spin-out recovery technique? Spin-outs are now becoming a major cause of the stories in which a vehicle went out of control.

G. Bechtel
Philadelphia, Pa.

See "What Would You Do?" on page 32 of this issue.—Editor.

PREJUDICE IN PERFORMANCE?

Gentlemen:

I must also agree with reader Robert V. Hendon that MT's Editors are prejudiced as far as the Big Three is concerned. I thought that some day you might give credit for a good thing and manage an unbiased opinion. I must disagree with your "Best Car of '54"; I am willing to put my Hornet up against any Ford for anything from ride to roadability and performance. What takes the cake are your performance figures; why don't you test the manufacturer's car that will perform the best (standard or overdrive transmission where available)?

Richard S. Hayes
Pittsburgh, Pa.

What can we say after we say we're not prejudiced? We think it's pretty clear that MT has looked out for the majority view in testing cars. Our performance figures are those of the most popular cars in a manufacturer's line—with the most popular trans-

Motor Trend

mission option whenever possible. The figures are based on scientifically conducted tests, not on personal bias. Keep in mind also that where a performance chart is presented, the cars are grouped in price class for a fair rating.—Editor.

APPLIED IMAGINATION

Gentlemen:

In a recent class in our course in problem solving, we turned our attention to automobile improvements which might be adopted in the near future. Because I thought that these might be of interest to you, I am passing them along to you.

Willard A. Pleuthner, Vice-President
Batten, Barton, Durstine, & Osborn, Inc.
New York, N.Y.

The material was so interesting to us that we couldn't help but pass on a brief version (space limitations, you know) to our readers. Here are some of the suggestions:

Bumpers all the way around for greater protection

Non-blinding or glareproof headlights with even better and wider vision ahead

Simpler means of making rapid repairs, resulting in lower maintenance costs

Automatic air conditioning—summer and winter

Special parking wheels to allow car to slide sideways into parking space

Refrigerator unit built in for water and food for travelers

Sliding self-locking doors in center, opening either way for easier, safer access

Automatic jacks for each wheel

High-fidelity music for cars

Windshield wipers which move horizontally, giving wider sweep

Tops that slide open.

—Editor.

INGENIOUSNESS, UNLIMITED

Gentlemen:

It seems to me that MOTOR TREND should have some space devoted to guys like me who are full of ideas for improving the motor car but haven't the time or mechanical skills to do so.

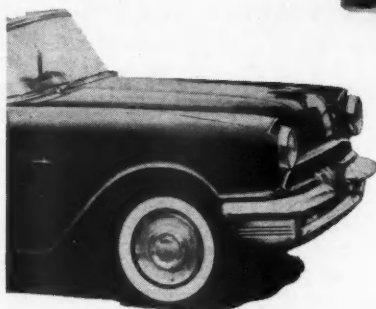
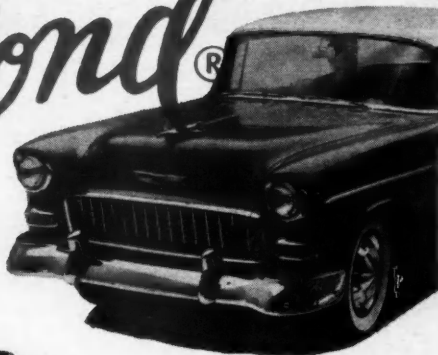
I would like my next car to be equipped with an electrical arrangement to cause all windows to close and all doors to lock when the key is turned in either of the door locks. I make many stops during a day's work and have lost much material as a result of leaving my car windows open or a door unlocked. These losses would not have occurred had it not been for the inconvenience of having to shut eight windows and lock four doors.

I would also like my next car to have a new ventilation system. Couldn't the air intake from the engine pick up air from above and slightly in front of each passenger position so that should a passenger be smoking, his smoke could be immediately sucked out and not disturb other passengers? Such a ventilation system should be equipped with on and off switches for each outlet, controlled from the dashboard.

J. A. Wallace
Pocatello, Ida.

We know of at least one automotive editor who would welcome the elimination of smoke-filled air supplied by his cigarette-smoking passenger friends.—Editor.

Belond®



1955 V-8

Chevrolet and Pontiac DUAL EXHAUST SYSTEMS

Equipment
for all 1955
V-8 models
SOON!

Dealers throughout the nation are able to supply Chevrolet and Pontiac V-8 owners *NOW* with the finest in extra-performance dual exhaust system design . . . BELOND!

If you've been a Chevrolet or Pontiac owner in the past, you have yet to experience the thrill of flashing V-8 performance and power in your own automobile. Try and then buy a new V-8-powered Chevrolet or Pontiac. Then join the thousands of performance conscious V-8 owners who have been enjoying the benefits of Belond Exhaust System products for years. When you equip your new V-8 with a dual exhaust system, insist on the time proven best . . .



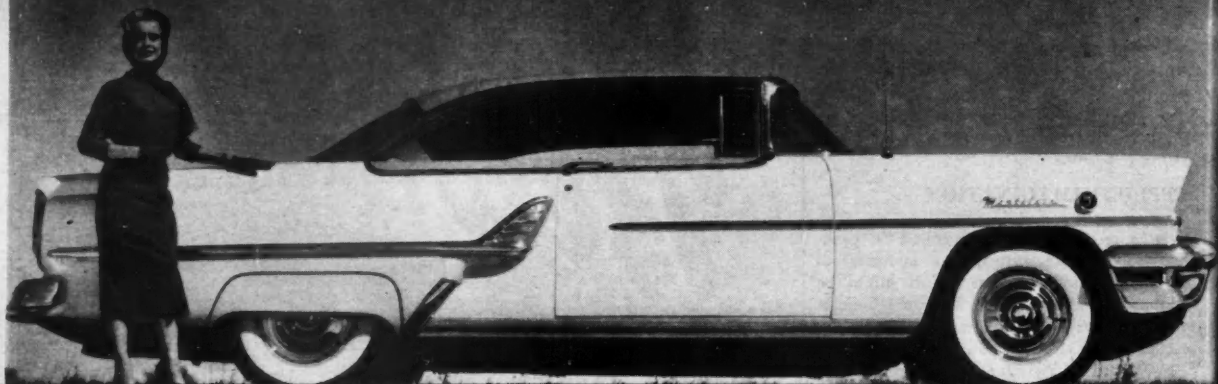
. . . your guarantee of the finest in extra-performance through exhaust system design.



Southern California

MUFFLER CORPORATION
CULVER CITY 2, CALIF.

*Trade Mark Registered, U.S. Pat. Off.



Spotlight on Detroit

By Don MacDonald

DETROIT, MICHIGAN—If one can judge by this city, the huckstering of new models is a carnival for dealer and buyer alike. Exactly what influence millions of free balloons, lollipops, and automatic pencils have in the purchase of a new car is problematical, but first-nighters visiting the showrooms were well supplied. Airline pilots flying over Detroit the night of Chevrolet's debut (October 27) thought there were Russians in the traffic pattern, because each dealership had its war-surplus searchlight aimed skyward to tell everyone that once again it's time to come down and ooh, aah, and dicker.

CONTRIBUTING THEIR SHARE OF CANDLEPOWER are the nation's Mercury dealers, who for 1955 have a wider range of cars than ever to sell. Topping the line is the Montclair; it's available now only in two-door hardtop (with or without transparent insert) and convertible form, but we'll stake our

April paycheck on the appearance of a low-slung, hardtop-like four-door in time for the Spring selling season. The roofline of this new series is nearly three inches lower than Monterey or Custom sedans although headroom remains quite adequate. If you prefer the Monterey, you can make your choice from a four-door sedan, hardtop coupe, or a station wagon with imitation (Fiberglas) wood sides. Price-conscious buyers have even a broader selection in the Custom series because, in addition to those listed above, there is a business-like two-door sedan.

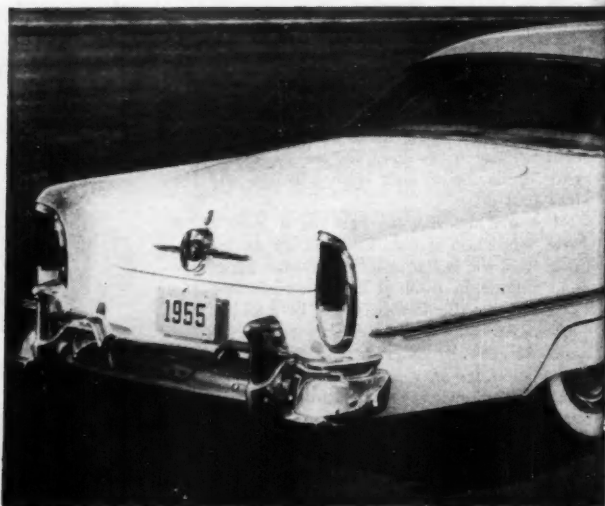
ENGINE OPTIONS, for a change, are not tied to transmission options. The Montclair has a much revamped, 198-horsepower V8 that will put 286 foot-pounds of torque (at a low 2500 rpm) into your choice of three-speed, overdrive, or Merc-O-Matic transmissions. If you want punch, overdrive with its 4.09 rear axle ratio is your best bet,

but economy-wise, it's probably a toss-up between this and the automatic with its low (3.15) axle ratio. The three-speed box uses a middle-of-the-road 3.73. Monterey and Custom cars come with a 188-horsepower (274 foot-pounds at 2500 rpm) engine that differs from the Montclair only in compression ratio. The jump from 7.6 to 8.5 to 1 adds 10 horsepower, according to the Mercury sales department.

DUAL EXHAUSTS ARE STANDARD on the Montclairs and Montereys, optional on Customs. All cars feature Champion's new conical seat, Turbo-charge spark plugs. As described in December MT, these 18-mm plugs have a wider space between the insulator and the outside shell to minimize fouling. Installation is easier because the conical seat is not as torque-critical as the old-style gasket. This change is only one of many that make Mercury's 1955 V8s quite different from last year's.

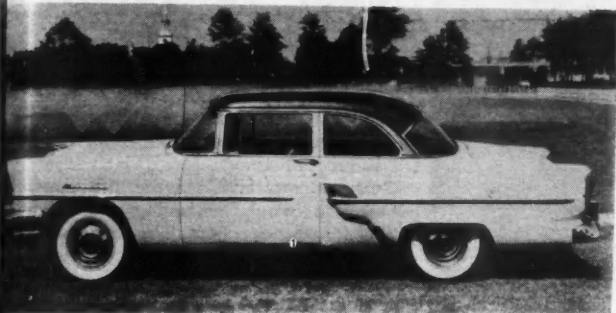


Entirely new are the Mercury's forward-raking headlights and full-scope windshield, as shown in this Monterey model



Rear end of Montclair coupe has new massive appearance; larger tail light treatment emphasizes greater length, width

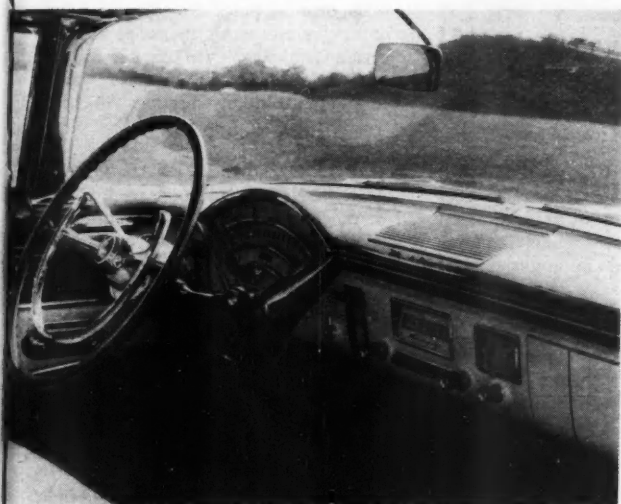
Mercury's price leader, a two-door sedan that shares a Ford body shell, has trim features that make it look much larger



Wagons in the '55 Merc line will again be among the industry's fanciest. The lower-priced Custom range offers this one



FULL DETAILS: '55 MERCURY



V-type cluster of the instrument panel is one of easiest to read of all '55 cars; gauges and speedometer are in tiers



Newly developed fabrics, including tapestry-weave nylon, are seen in Montclair; rear seat has adjustable center armrest

ENGINEMAN VIC RAVIOLO'S POL-

ICY of continuous basic improvement can be seen in the new cylinder heads which feature an "open wedge" combustion chamber instead of the octane-hungry "kidney section" favored in the past. Camshaft, tappet, and pushrod materials have been changed to improve "metallurgical compatibility," another way of saying that scuffing and galling of these parts will not be a problem in 1955. Mercury's already low engine noise level has been further reduced by reworking the air cleaner and valve covers, a redesigned timing chain, and provision of a pressure relief pocket in the oil pump.

THE INCREASE IN POWER necessitated extensive changes in all three transmissions. The nation's hot rodders think nothing of installing a Cadillac engine in a Ford and dragging for thousands of miles without touching the

drive train, but factories have warranties to worry about. When horsepower goes up, transmissions and differential must be beefed-up accordingly. For Mercury, this meant an almost complete revamp of the automatic box, even including the case, and it gave them the chance to really work over the hydraulic control system. Upshifts and downshifts have been smoothed out and there is provision for an automatic low gear start with the selector in DRIVE range.

MERCURY'S NEW STYLING is evolutionary, according to the press release, and we are inclined to agree. Despite completely fresh body shells and trim, these Mercs bear a family resemblance to all that have been built since 1951. The grille even has a touch of last year's Lincoln thrown in for good measure. Chrome is a bit on the heavy side, especially on the Montclair, but the overall effect is pleasing. The headlights

squint out from under large bonnets; fortunately the driver is not similarly handicapped—he's nearly surrounded by the truly wrap-around windshield. We would hesitate to count in karats the weight of the tremendous tail and back-up light lenses; they are actually larger than the headlights, and they should help prevent rear end dents.

INTERIORS ARE HIGHLIGHTED by

a completely novel, and in our opinion very beautiful, instrument panel. The gauges are arranged in tiers in front of the driver with heater controls, clock, and radio grouped asymmetrically on either side. It is unfortunate that Mercury hasn't followed the trend to crash pads, or at least dull paint on the top side of the dash. Fabrics available on the upholstery include tapestry-weave nylon, woven plastics, plain nylons, leathers, and vinyls, available in 15 solid and 30 two-tone colors. (Continued on page 20)



Buick's departure from past detail styling is evident in these views; honeycomb grille is fronted by revamped bumper, tail lights have lost bullet-like look in '55

THIRD PLACE BUICK have themselves in a quandary this year. They frog-leaped over Plymouth's shoddy 1954 sales record by offering the public a combination of completely fresh and quite esthetic styling, power under the hood to spare, and a range of cars that infringed on every price bracket. 1955 sees an Exner-styled, powerfully new Plymouth and a Buick that must content itself with a facelift, however extensive, inside and out. Stylist Ned Nichols and engineer Vern Mathews have done wonders within the restrictive framework of tooling amortization, a limitation even fat General Motors must respect if they wish to stay fat. Will Buick hold third place? We won't bet, one way or the other, because it is truly a fight between champions now that managerial problems in one corner of the ring have been solved.

BIGGEST ENGINEERING NEWS is the new "variable pitch" Dynaflo transmission. This is not to be confused with the ideal of an infinitely variable set of stator blades in a torque converter as discussed in MT, Jan. '54. Like most ideals, this would be hopelessly complicated, so Buick settled for just two positions. One is for best cruising economy and the other is for best performance; operation is automatically dependent on throttle opening. Dynaflo, whose performance was once unkindly compared to putting your foot in a bucket of molasses, now has a punch that Hydra-Matic will respect even though it delivers it with the same old molasses-like smoothness.

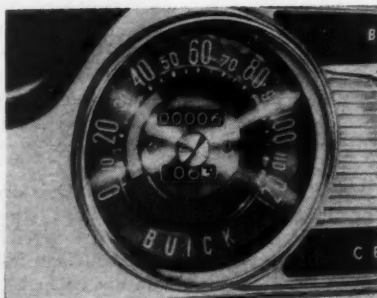
YOU CAN'T COUNT PORTHOLES on 1955 Buicks and expect to tell models apart. Century, Super, and Road-

master each have four, and they stand for 236 horsepower under the hood. The big jump comes from larger four-barrel carburetors, ported intake and exhaust manifolds, higher lift cams, boosted compression ratio, and a real fat (four-inch) bore. The three port-hole Special should get along fine with its new 188-horsepower engine. Aside from the number of holes in the front fender, you may wonder why, for the first time, you can buy Roadmaster machinery in the Super at a considerable price differential. Our guess is that the luxurious (compared to the Super) Roadmaster will, within a couple of years, drop its Buick nameplates in favor of its own and tackle its not-so-friendly cousin Cadillac on even terms in the top price bracket. It will, in other words, follow the route of Chrysler's Imperial, which this year is on its own.

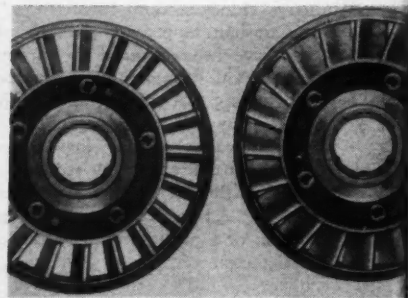
BOTH FRONT AND REAR QUARTER PANELS and hood are involved in Buick's extensive 1955 facelift. You can see an Oldsmobile-like cutaway in the front fender and the tail light treatment is straight from Buick's showy Skylark convertible, which, incidentally, has been dropped from the line. While we don't consider the new fly-screen grille either more or less attractive than last year's, you'll never mistake a 1955 Buick coming at you. There are a fantastic number (200 in all) of interior options available. Power steering is standard on Super and Roadmaster; power windows on all convertibles except the Special as well as the Roadmaster Riviera. A final bonus for Super and Roadmaster buyers (and one which should be offered to all) is a new windshield wiper that really wraps around the wrap-around windshield.



Roadmaster Riviera for '55 has gold floral design, blocked cordaveen inserts; Roadmasters have chromed roof bows



Redliner speedometer is standard on Centurys, optional on Specials. Other models have horizontal-type indicator



Variable-pitch Dynaflo stator blades change angle under acceleration. At left, blades are at high-performance angle

'55 RAMBLER

WE READ IN SOMETHING WE WROTE (October Spotlight) that the new Hudson and Nash Ramblers would each have their own, larger engine and distinctive trim. We should get at least a passing grade for this prediction, even though it all won't come true in 1955. According to President George Romney, "American Motors plans to *ultimately* produce this . . . car in separate series for Nash and Hudson dealers, *but* to retain volume advantages by producing them on the same assembly lines and on the same body shell." Meanwhile, there is a Rambler in each line-up with only a medallion to tell them apart.

THE "SUPER FLYING SCOT" ENGINE, a 90-horsepower L-head six, powers all models in both lines. This was the premium engine last year when it was available only with Hydra-Matic or on the long wheelbase, four-door cars. An 85-horsepower version was standard at the time on stick-shift two-doors. The bugs in this engine, essentially unchanged for several years, have long since been swatted. Transmission options also remain the same with three-speed standard, overdrive, and Hydra-Matic optional.

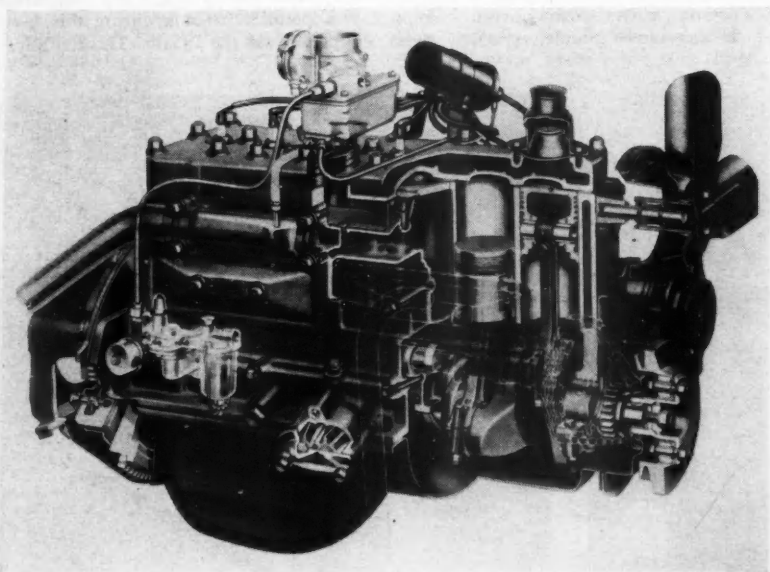
FACELIFTING FOR 1955 is not just for its own sake but eminently practical. Nash stylists finally reached for



Compared to the '54 Rambler shown in top photo, '55 four-door sedan has same body styling, combines new grille with most important change—open front wheels

their metal shears and provided front fender cutouts. Certainly a major reason for buying a Rambler is its compactness, but this advantage was almost lost in the past by the shrouded front wheels

which restricted maneuverability to the point where it could beat a Cadillac out in a U-turn by only three feet. Now, a turning diameter of 36 feet for the 100-inch-wheelbase two-doors and 38 feet for the eight-inch-longer four-doors make them ideal for weaving your way in and out of the A & P parking lot, which, after all, is what these cars are primarily intended for.



"Super Flying Scot" engine powering Rambler is unchanged for '55. Economical L-head six produces 90 hp, has 195.6 cu. in. displacement, 7.3:1 compression ratio

THE NEW RADIATOR GRATING is, in our opinion, a considerable improvement over past designs. Other than "Rs" instead of "Ns" on the hub and gas caps, this completes the list of styling changes. Why not? We can think of no reason for revising the shape of the Petty-designed female on the hood and, fortunately, neither could American Motors. Body options remain the same as last year, ranging from an austere two-door to the pert, notch-roof four-door station wagon. The pioneer, cowl-mounted air conditioning system combined with Weather Eye heating is continued, as is the optional continental spare tire mount. These Hudson or Nash Ramblers (your preference) are a good example of what to expect from two independents rejuvenated by marriage; we'll feature an even better example (also from Kenosha) in the March issue of *MOTOR TREND*.

Spotlight on Detroit

FULL DETAILS: '55 CADILLAC

YOUR 1955 CADILLAC should be of even higher quality than those of the past because even though more cars will be built, the time required to build each car will be greater. This, of course, means the addition of another work-shift over on Clark St. The standard models have actually been restyled rather extensively, even though it is not too noticeable in pictures or on the road. Side chrome has been changed so that it now forms a true character line (accentuates a line actually formed in the sheet metal), and the Florentine-curve rear window treatment of last year's coupes has been extended to include sedans. Grilles have a wider mesh, and the parking lights have been squared off and moved outward. Trunk ledges are all graced by a series of vertical chrome strips which purportedly create the illusion of lowering Cadillac's prominent bustle back.

BIGGEST STYLE CHANGE is in the Eldorado, this year a \$6000-plus convertible that has a rear end straight from the La Espada and El Camino show cars. It looks good enough to make us wonder why it is not available throughout the line, but perhaps they are saving this for 1956. The Eldorado is powered by a 270-horsepower, 331-cubic-inch V8 that mounts twin, four-barreled carburetors and has a 9 to 1 compression ratio. This engine is available as an option on other models, which normally have a single-carburetor, 250-

horsepower version. The Eldorado's revolutionary and attractive aluminum-spoke wheels are also an option throughout the line. Standard equipment on all models includes power steering, windshield washer, and a smoothed-out, dual-range Hydra-Matic.

CADILLAC'S ENGINEERING PHILOSOPHY is premised on the statistic that over 90 per cent of their customers want the utmost luxury in a car that is the least possible work to drive. Agility is a secondary consideration, a fact which makes it the more amazing that Cadillac was our top performing road test car in 1954. Chief Engineer Fred Arnold has his problems because he would like "to do the most things for the most people." For example, shocks on the current model could be tightened up and "export" springs used for better cornering, but the "boulevard" ride would suffer. He would like to give you both, and does wherever a compromise is not necessary.

CADILLAC'S STYLING PHILOSOPHY is premised on what the public wants, not what they ought to want. Time and again, the so-called experts (ourselves included) hand out the concours ribbons to competition; in fact, others seem to have won everything lately but sales leadership in the high-price bracket. While sales leadership doesn't put one above criticism, it helps. It also causes people, especially those

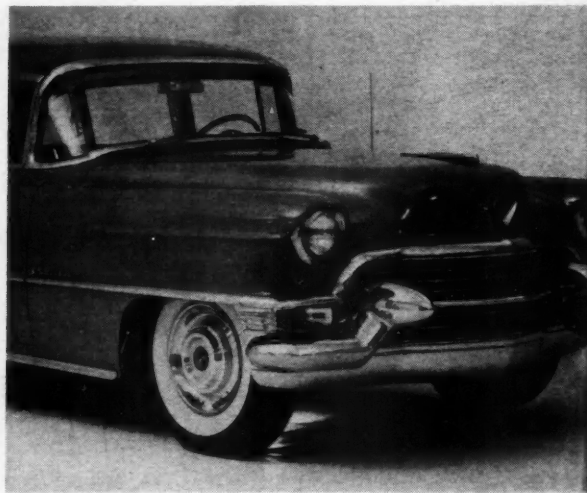
who don't own Cadillacs, to gripe about little things.

VANCLEEFF AND ARPELS' JEWELRY, as well as Harry Winston's, has become familiar to millions of common folk through the medium of Cadillac advertising. Honey-rich copy drives home one theme: you haven't arrived until you've bought your first Cadillac. While a few sensitive souls have undoubtedly been driven to Lincolns and Packards in defense against this clever sophism, it works beautifully on most people. Surprisingly enough, the default of others gave Cadillac its current hold on the prestige market. Back in the late Thirties, both Lincoln and Packard put their chips on middle-priced cars. They sold a lot of them, but in the process lost much of their prestige; the road back has been slow and painful.

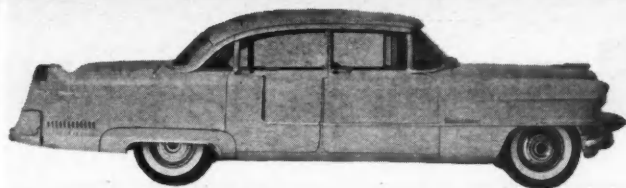
A LITTLE KNOWN FACT is that General Motors nearly dropped Cadillac back in 1933 when the division was losing millions on its ponderous V-12s and 16s. Non-philanthropic GM gave it one last chance when the late and great Nicholas Dreystadt was moved up from service to production and then to general manager. He soon boiled the line down from four engines on eight different wheelbases to a standardized, modern V8 that actually excelled the multi-cylinder jobs in power and smoothness. A peculiar paradox during this hectic period was the LaSalle. Theoretically, it



Cadillac again shows two convertibles, the workaday version (above) and the Eldorado, with its new wheels and rear end



Note how deftly Cadillac stylists have refrained from out-dating earlier models, but have given freshness to the '55

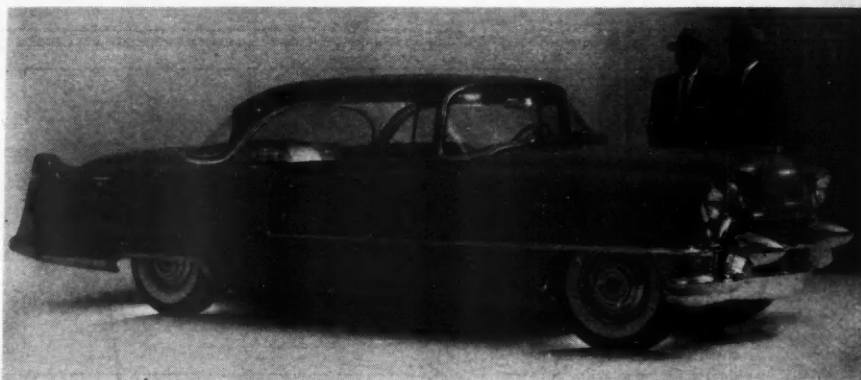


The Fleetwood Sixty Special has its usual long tail, but a new narrow center post, first sign of the four-door hardtop car

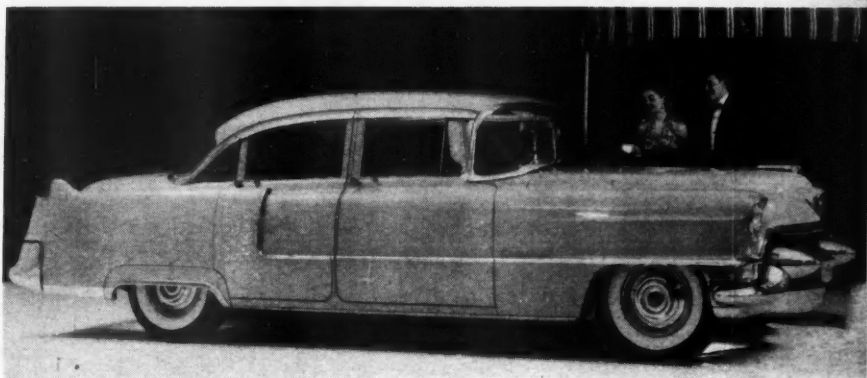
should have backfired on Cadillac the way the Zephyr did on Lincoln. However, this didn't happen because for some reason, the public never associated LaSalle with Cadillac, and secondly, LaSalle by 1940 was basically a Cadillac with a different nameplate. It became the Series 61 in 1941, and sold faster than Dreystadt could make them. Cadillac went into the war years with a top quality, relatively low-priced (\$1345) car that still commands a premium on the used car market. This car is given credit for their enviable position today.

FRED ARNOLD'S CHIEF WORRY is the old saw that complacency is the downfall of the leader. He tries to keep one jump ahead of competition and this applies particularly to certain other GM divisions whose initials begin with "O" and "B." Cadillac saves a lot of money by sharing a body with Buick and in the process, gives you better value. Even more could be saved if the relatively low-production Cadillac (this year's goal is 150,000) used an engine or frame in common with another GM division. Right now, horsepower-leader Cadillac (270 in the Eldorado) is hard at work on a brand-new V8 which might be ready for production in 1956.

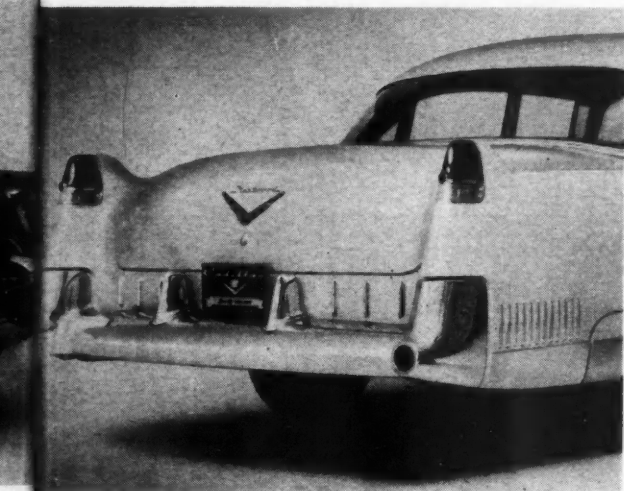
A PERFECT CADILLAC IS RARE, and so is a lemon. Regardless of how high the delivered price, truly fine workmanship is a problem on any assembly line. Twenty-five years ago, one craftsman (Continued on page 20)



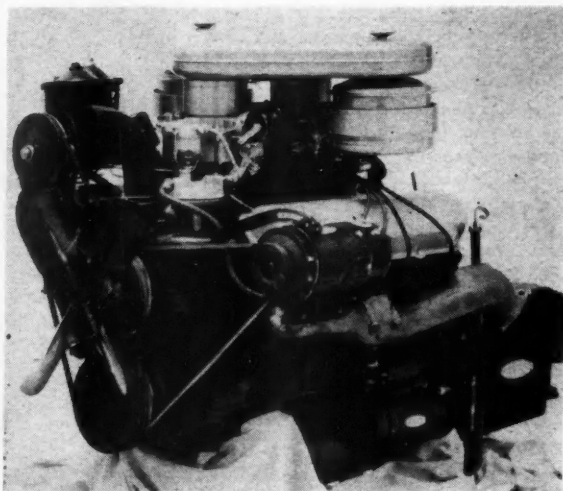
Chrome on the attractive coupe de ville's sides is also done with restraint. The horizontal bar accentuates an indentation in the metal itself this year



Most popular car in the line will be the Series 62 sedan, this year with the Florentine curve rear roof line that GM pioneered on its '54 hardtops



With everyone else going rear-end happy, Cadillac shows surprising restraint in this back view of the new Sixty Special



Here is the 270-hp Eldorado engine, a souped-up version of that on the lesser Cadillacs. But you can have it on them, too

CONTINUED

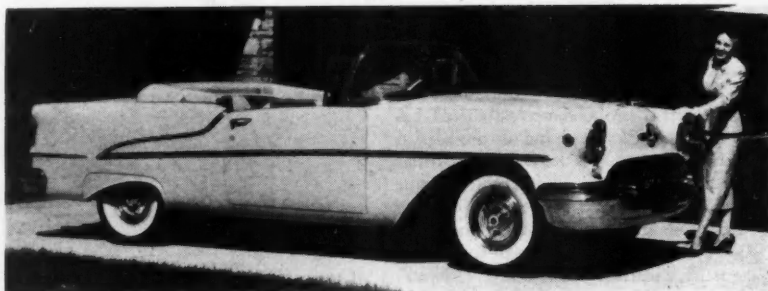
Spotlight on Detroit **FULL DETAILS: '55 OLDSMOBILE****"LIGHTNING CAN STRIKE TWICE"**

says Oldsmobile in radio commercials describing their 1955 cars. Could be, but the second bolt seldom has the force of the first. The new models have been subjected to a considerable amount of plastic surgery and you'll probably like the change, if only for its own sake. Instead of teeth or lattice-work in the grille, the space is taken up by chrome block letters so arranged as to spell "OLDSMOBILE." The headlight bezels have been refashioned and so have the tail lights.

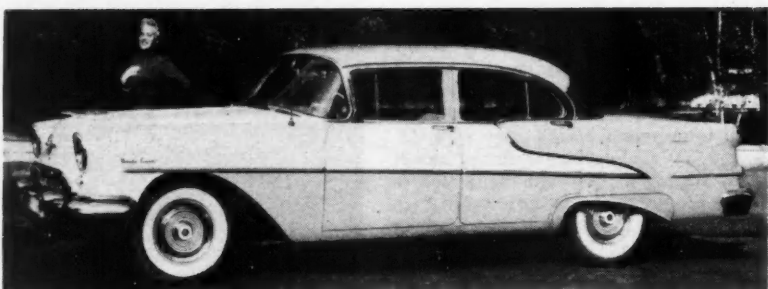
OLDSMOBILE'S TWO-TONING was top-notch in '54 and set a trend. This year's is a variation on the same theme, which their stylists call "flying colors." Fourteen of the 19 body colors are new, giving a grand total of 89 two-tone schemes. Interiors emphasize nylon fabrics, and on the more deluxe models, genuine leather. Convertible tops come in tan, green, blue, black, and white, with white orlon an optional extra.

THE ROCKET EIGHT has gotten a second wind with 202 horsepower and an 8.5 to 1 compression ratio. A greater than average chunk of this seems to reach the rear wheels, as Walt Woron's stopwatch shows on page 54. For the first time, the big engine is available in all models—standard in the 98 and Super 88, optional in the 88. There is a 185-horsepower version that is standard in the latter series. Power has been upped through newly designed combustion chambers, higher lift (0.40 inch) camshaft, larger exhaust valves, and cooler spark plugs.

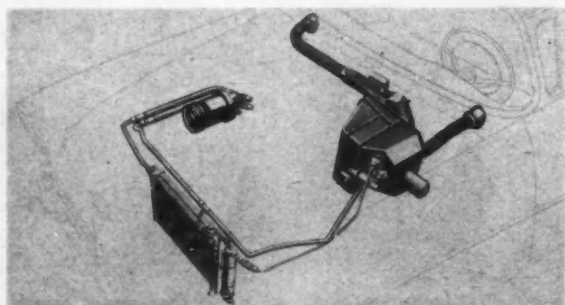
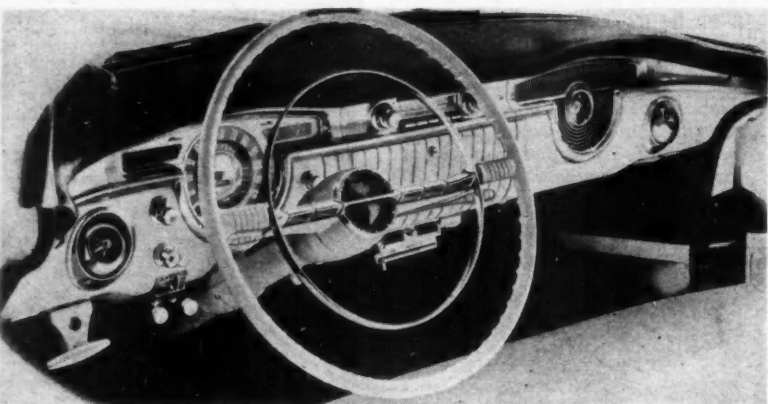
Ball-type, directional air conditioning outlets are located at extremities of instrument panel; a third, non-directional outlet vent is mounted just below the central glove compartment, adjacent to air conditioning system's control panel



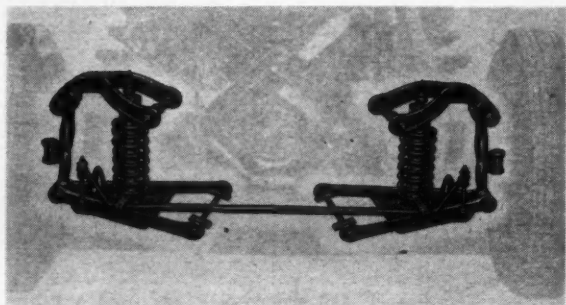
Unusual rear fender skirt adds to convertible's rakish appearance. Plastic top boot is one of the many options, as are two-tone interiors, matching two-tone paint



Extra-cost two-tone paint combinations are divided by a stainless-steel molding; this is the "98" series, with its very long rear deck and a super-luxury interior



Air conditioning system, an optional extra, is mounted forward of cowl; unit can be installed by dealer at any time



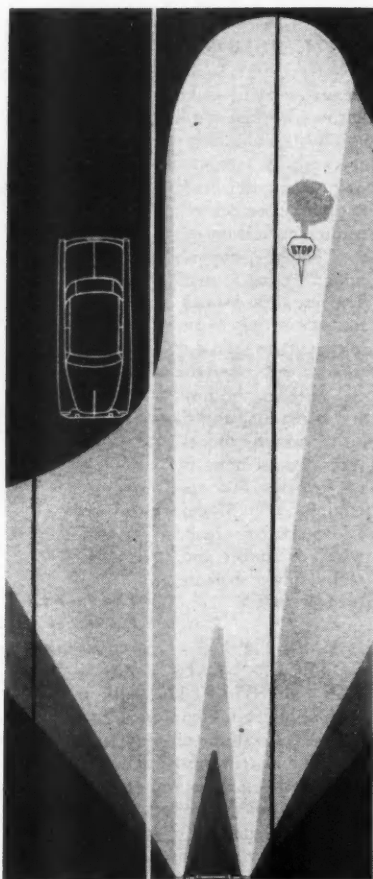
Oldsmobile's front end has new control arms to accommodate direct-acting shock absorbers mounted within coil springs

Motor Trend

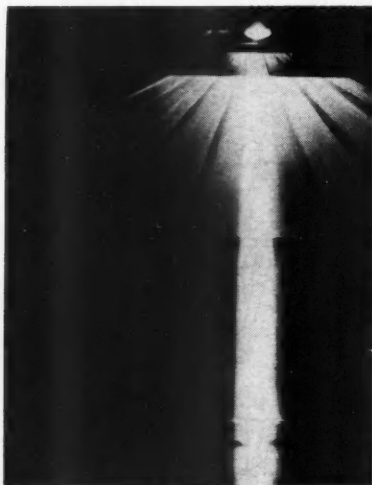
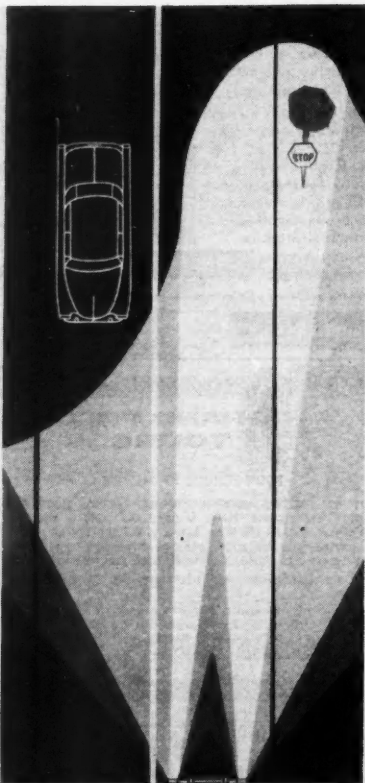
NEW HEADLIGHTS FOR '55

AS REPORTED IN JULY SPOT-LIGHT, lighting engineers have been hard at work on a new sealed-beam unit with a target date for universal adoption in 1955. Almost more difficult than the technical problems involved was the chore of lobbying the various North American state and territorial legislatures into amending their vehicle codes to allow use of the new light. Existing codes were based on the capabilities of the old sealed-beam unit, and any improvement was technically illegal. Approval is still awaited from 22 jurisdictions, but the Automobile Manufacturers' Association and the five major headlight producers decided to go ahead and release the new unit in areas where it is legal. It will be factory equipment on your new car if you live in the right place, and will also be available through replacement channels.

NO VEHICLE MODIFICATIONS are necessary to install these lights, which will be sold in both six- and 12-volt form. Biggest improvement is in the low beam, which gives as much as 80 feet more seeing distance along the right side and shoulder of the road. Nighttime driving in fog, snow, or rain is aided by a sharp reduction in stray light radiating upward from the lower-beam filament. These maverick beams were the ones which reflected back in your eyes with the old-style filament. Upper-beam seeing distance has been helped by raising the wattage from 45 to 50. Proper aiming is critical, but quite simple. Next month, MT will give you step-by-step instructions so you can do it yourself. Check with your local Auto-Lite, General Electric, Guide, Tung-Sol, or Westinghouse dealer to find out when the lights will be available in your neighborhood.



Comparative illustration shows how lower beam of new headlight can extend seeing distance along roadside by 80 feet



Beam pattern reflected on screen demonstrates the amount of stray light spreading upward from headlights in use today



Here, new sealed-beam light shows ability to reduce upward reflections; compare this beam pattern to the one shown at left



Road tests were part of new light development; this demonstration for administrator's approval was given back in 1953

January 1955

DETROIT PUBLIC LIBRARY

At Indianapolis, Sebring and Mexico, race drivers depend on . . .

COP-SIL-LOY

BRAKE AND CLUTCH COMPOUNDS

- STOPS "FADE", REDUCES SQUEAL
- INCREASES BRAKE LIFE—SAVES MONEY
- RESISTS WATER AND OIL

COP-SIL-LOY is a pulverized metallic alloy, suspended in a bonding agent. Just roughen linings and brush on.

Enjoy a new driving thrill by treating your brakes with COP-SIL-LOY. At any speed—on any road—in any weather, you can trust your brakes to stop safely and smoothly, with less pedal pressure.

COP-SIL-LOY is GUARANTEED

DO IT YOURSELF

\$4.95
post paid

Complete treatment and instructions for applying

ABBOTT-KIPLE CO.

1826T Westwood Boulevard
West Los Angeles 25, Calif.



GRAND PRIX TOURS

TOUR EUROPE BY MOTOR COACH

Enjoy an exciting vacation touring France, Belgium, Germany, Switzerland, Italy, England and Ireland. By deluxe Motor Coach, you'll be taken to all the racing classics, automobile factories, and be introduced to all the local sports car clubs. Excellent hotel accommodations. Write for information and literature for all tours to:

Larchmont Travel Agency,
221 No. Larchmont Blvd.,
Los Angeles 4, Calif.
Phone HO. 3-5689



Highly Concentrated



LEATHERKLEEN

NEW LIFE to leather and plastics—PREVENTS cracking, fading, drying IN ONE FAST OPERATION

CONTAINS

saddle soap.....CLEANS
neatsfoot oil.....CONDITIONS
beeswax.....PROTECTS

at your dealer or—

8-oz.—\$1.50 Ppd.

TANNER PRODUCTS • dept. MT
716 E. Washington Blvd. • Los Angeles 21

Get into Good Paying AUTO BODY and FENDER WORK



Big demand in Auto Body and Fender work. Start training now spare time at home for good pay work. Practical shop experience included. U.E.I. Training covers metal work, welding, painting, etc. Placement service—or we will show you how to start your own shop. Behind U.E.I. TRAINING is a large national organization founded 1927. Write today for FREE facts—no obligation.

MAIL NOW FOR FACTS

Auto-Crafts Div., UTILITIES ENGINEERING INSTITUTE
2523 Sheffield Ave., XAN-15, Chicago 14, Ill.
O.K. Rush Full Facts

Name..... Age.....
Address.....
City..... Zone..... State.....
☐ Check here for information if you are under 17.

Spotlight on Detroit

'55 WILLYS and KAISER

DESPITE RUMORS TO THE CONTRARY, 1955 Willys and Kaiser passenger cars will make their public bow during the first week in January. The

new Willys will have an extensive face lift both front and rear and will continue to feature its version of the Kaiser "Super-sonic" L-head six. The fine little F-head six engine has been relegated to station wagons and commercial vehicles, the former being unchanged for the coming model year. Biggest news is the restyled and re-engineered Model CJ-5 civilian Jeep, which is longer and better riding than its predecessors.

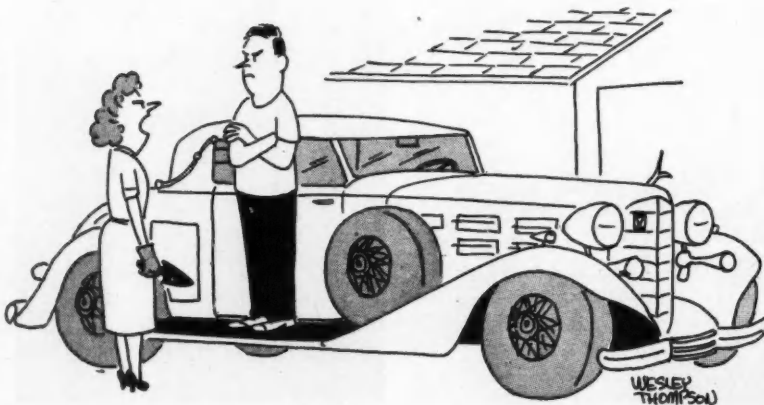
THE SUPER-CHARGED KAISER MANHATTAN will continue with only detail engineering and styling changes, as will the unsupercharged Special. The Darrin sports car will be available, unchanged, as Kaiser dealers will start the new year well supplied with these. We sometimes wonder why the financial press persists in its doleful predictions that Kaiser-Willys is on the auction block or through. Admittedly,

things have been a bit shaky this past year in Toledo, but the wisdom of basing the business on the ever-popular Jeep and Jeep truck is apparent when



The new CJ-5 Willys Jeep, introduced by Kaiser-Willys December 10, is a more rugged, wider, longer and more comfortable vehicle than its seven previous versions

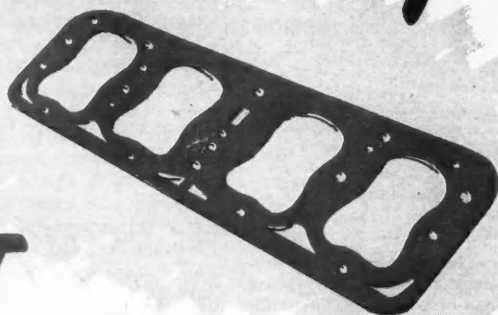
you study current sales figures. K-W is the only commercial vehicle manufacturer whose sales this September were better than for the same period in 1953. Toledo production lines spew out about 70,000 commercial cars per year (not counting 14 per cent in military units). From a survival standpoint, it really doesn't matter how many passenger cars they sell. (Continued on page 20)



"Classic car or not, I need it to haul some fertilizer!"

greater *Power* ^{more} *plus Mileage!*

ORIGINAL HI-COMPRESSION HEAD GASKET



DIRECT FROM THE ONE AND ONLY ORIGINAL MANUFACTURER!

at the new low prices for all 1500 makes and models

\$4.95

(Pair furnished for V8's)

\$4.95



\$4.95



\$4.95



● Without buying expensive custom cylinder heads

● Without expensive milling which may result in overheating

● Easiest, lowest cost way possible of obtaining up to 20% higher compression

● Tremendous guaranteed gasoline savings up to 6 miles per gallon

UP TO 20% HIGHER COMPRESSION, ADDED HORSEPOWER

The world's largest suppliers of HI-COMPRESSION HEAD GASKETS have sold over 100,000 sets to date without a single return! By popular demand, we now offer the new improved .020 solid metal Hi-Compression Head Gasket FACTORY TO YOU. Easy to install yourself.

GUARANTEED

To increase power • Increase acceleration • Increase top speed • Increase mileage • "Blow-out" proof

● Enjoy no-knock competition car performance today with an original Hi-Compression Head Gasket.

● Today's high octane gasolines demand high compression for full power benefits . . . take advantage of that available power with an original Hi-Compression Gasket.

● Bay State Automotive has been the sole supplier for Hi-Compression Head Gaskets advertised in this magazine.

● Bay State also supplies more Hi-Compression Gaskets to aircraft, motorcycle, marine and foreign car owners than all the companies combined.

Order with confidence today at the new low, low price of \$4.95 ppd.

**BAY STATE AUTOMOTIVE
110 Pleasant Street Malden, Mass.**

DEALERS: contact F. Stan Davis, National Sales Mgr.

INSTANTLY HIGHER TOP SPEED, POWERFUL ACCELERATION

HIGHER COMPRESSION: A stock head gasket, when installed and properly tightened down, attains a thickness of .060" to .065". Consequently, installation of an .020" solid metal POWER-FLO gasket is the equivalent of a stock head milled .045" to .050". This reduces combustion chamber area sufficiently to produce upwards to one full point increase in combustion ratio in your engine.

Immediate shipment guaranteed!

ORDER NOW

**BAY STATE AUTOMOTIVE
110 Pleasant St., Malden, Massachusetts**

Please RUSH me your Hi-Compression Head Gasket post-paid. I enclose money order ☐ check ☐

My car is: make _____ model _____
year _____ no. cyl. _____

Solid aluminum **\$4.95** Solid copper **\$6.75**
(Money-back Guarantee)

name _____

address _____

city _____ zone _____ state _____

Enclose \$1 if C.O.D. Pairs furnished for V8's. Same price.

Snap-on Tools

for servicing
ALL makes
of cars...

U.S. and FOREIGN

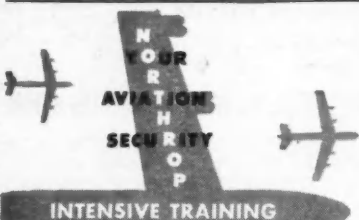


● Servicing your car for top performance requires tools that are *right* for the job, and Snap-on tools are the stand-out choice of America's top mechanics. Snap-on offers the most complete line of standard wrenches and special automotive service tools, also a wide selection of wrenches in Whitworth and Metric sizes for servicing foreign cars. Available only from Snap-on branches and Snap-on Men or direct from factory. Write today for free Metric-Whitworth folder and standard tool catalog.

SNAP-ON TOOLS CORPORATION

8023-A 28th Ave., Kenosha, Wisconsin

*Snap-on is the trademark of Snap-on Tools Corporation.



... Prepares you for the career you want in aviation... for the Aviation Security, the unlimited future, the SUCCESS which you want. AND NORTHROP AERONAUTICAL INSTITUTE training gets you there fast—in from one to two years you will be ready to enter the Aviation Industry!

VETERANS—Northrop Institute approved for your training.

YOUNG MEN—High School Graduates: In the Aviation Industry AND the Armed Services, your Northrop Training puts you ahead... farther... faster.

STUDENT PLACEMENT—Northrop has impressive record of graduate placement. Every effort is also made to help students obtain part-time employment, if desired.

NORTHROP AERONAUTICAL INSTITUTE

1103 W. Arbor Vitae Street, Inglewood, 1, Calif.

Please send me immediately the Northrop catalog, employment data, and schedule of class starting dates. I am interested in:

- ☐ Aeronautical Engineering Technology
- ☐ Aircraft Maintenance Engineering Technology
- ☐ Master Aircraft and Engine Mechanic
- ☐ Jet Engine Overhaul and Maintenance

Name _____ Age _____

Address _____

City _____ Zone _____ State _____

Veterans: Check here ☐ for Special Veteran Training Information.

Spotlight on Detroit

'55 Mercury (Continued from page 11) Beauty must have a chassis and Mercury's is all new. Wheelbase has been increased one inch to 119, except for station wagons, which are still 118. Rear tread is three inches wider (except wagons); Mercury retains its hotchkiss-type drive to make the lowered silhouette practical. An interesting feature which, as far as we know, is a Lincoln-Mercury exclusive is a revival of automatic chassis lubrication. You can skip your monthly trip to the lube rack by merely pressing a button on the instrument panel. Accessories include all the usual power items plus factory-installed air conditioning. Tubeless tires are standard. In essence, Mercury is a big package in the medium-price field. You can measure their success by noting that from 1938 to 1946, 250,000 Mercs were built; from then until now, 1,250,000 have hit the road. They have obviously achieved the bulk of this increase (about 800,000) at the expense of the many other makes in this price bracket.

'55 Cadillac (Continued from page 15) built some five or six Cadillac engines a day. He took pride and a personal responsibility. A progressive assembly line precludes this type of workman, so recourse must be had to posters, more time for a given operation, and most important, quality control. This last starts with the dealer pipeline which funnels in product information reports (PIRs) on manufacturing and design failures. Dealers would soon lose interest in PIRs if they were not acted upon immediately, so they are—religiously. These spot the workman at fault, and if it lies with his methods or machine (and not a chronic Monday hangover), this operation becomes subject to statistical quality control which ranges from a sampling to inspection of every part produced. Cadillac was not the first to do this, but they probably developed the system to a greater degree than any of their competitors. Every machine tool operator in the plant has his production charted. Posted by the machine, these show if he goofed, when, and how often.

car owner's LIBRARY

SPORTS CARS IN ACTION

By John R. Bond

Published by Henry Holt and Company, Inc., 383 Madison Ave., New York 17, N.Y. \$10.

AN OUTSTANDING compilation of 36 of the world's greatest cars (touring, dual-purpose and strictly competition), *Sports Cars in Action* brings to the reader not only photos, mechanical details, and performance analyses of the latest-type cars, but the behind-the-wheel impressions of a man who has road tested most of them. A recognized authority on motoring in general, and sports cars in particular, John Bond expresses his enthusiasm and knowledge of cars in a handsome, glossy-paged volume which, to us, is one of the most comprehensive approaches to the world of sports cars published to date; surprisingly, it's an approach that will appeal to the Plymouth owner as well as to the pilot of a Pegaso (which, by the way, is one of the fascinating cars included in the book). Throughout 254 orderly pages are construction data, competition feats, and forthright discussion of why the cars are outstanding; clocked speeds, acceleration graphs, and specification tables supply a ready

reference to each car's prowess. We class the introductory chapter as a valuable book in itself. Measured by weight, size, or content, *Sports Cars in Action* has top-notch per-dollar value.

A PSYCHOLOGICAL APPROACH TO ACCIDENTS

By Norman Roberts Lykes

Published by Vantage Press, Inc., 120 West 31st St., New York 1, N.Y. \$2.95.

ARE YOU ACCIDENT PRONE? You'll find that question on the cover of Norman Lykes' book—and before you've finished the first few chapters you might be convinced that you'll have to give a positive answer to the question. The line the author draws between the average-to-good driver and the accident-prone-to-dangerous driver is quite thin; we found the answers to most of our questions not in the book, but in our discussion of it. It appears that controversy is expected; the author goes to the unusual extreme of giving his address—inviting your comment. You're bound to discuss Lykes' proposal for reducing accidents by the simple expedient of raising the bad driver's insurance rate with each accident—thereby soon reaching a point where he can no longer afford insurance; and if he isn't allowed to drive without insurance, we're rid of another highway menace. You'll think about the book the next time you follow too closely behind another car, because, says the author, it can mean that you *want* to have an accident! Includes accident proneness on the road, in industry, and in the home.

End Filter Replacement FOREVER!



TRY THIS TEST

This simple "bronze that breathes" smoke test demonstrates the amazing porosity of a Micro BRONZE sintered bronze oil filter unit. Used for centuries, bronze has withstood the test of time. Metallurgists call it "the timeless metal." Thanks to war-time and post-war scientific development, Micro BRONZE engineers now use sintered bronze to prevent undue engine wear and eliminate frequent oil changes.

with Revolutionary New Type

Micro BRONZE Permanent All-Metal Oil Filter

ORIGINALLY DEVELOPED FOR THE U.S. GOVERNMENT for use in supersonic aircraft and guided missiles, Micro BRONZE-type filters are the only filters made that provide full lubrication protection for modern automobiles!

ONLY FILTER
THAT DESTROYS
ENGINE ACIDS

GUARANTEED
FOR
99 YEARS

FILTERS THE
DIRT BUT NOT THE
DETERGENTS

PAT.
APPLIED
FOR

CHANGE OIL ONLY ONCE A YEAR! Here at last is an oil filter that never needs replacing...increases your engine power...ends monthly oil changes...adds thousands of miles to engine life...stops waste of valuable oil additives...and saves you worthwhile money in the bargain!

THE SECRET IS THE "BRONZE THAT BREATHES"

Millions of tiny bronze balls are fused or "sintered" together to form the astonishing, microscopically-fine filter screen that *never wears out!* Tests in huge gasoline and diesel trucks give conclusive proof that Micro BRONZE type filters are the finest, most economical oil filtering units ever made.

FILTERS THE DIRT—BUT NOT THE DETERGENT!

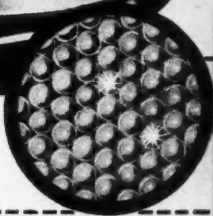
Three things cause engine wear: Friction, acid and abrasives. Major oil companies have developed heavy duty oils containing expensive additives and detergents that greatly reduce engine wear. Old-fashioned cloth, paper or earthen filters—standard equipment on many cars!—soak up these beneficial elements, but by-pass damaging abrasives and metal particles into the engine. The Micro BRONZE exclusive double design filters out abrasives and metal particles as microscopic as 39/millionths of an inch (one micron). Oil additives are left in, suspended in the

oil itself, to provide a protective film between moving parts. New Micro BRONZE Oil Filters, combined with modern HD oils, *double your engine's life!*

Today's motor oils never wear out, but they can become so diluted by acid-creating water and gasoline vapors that they no longer do their job. Burned gasoline creates a strong sulphuric acid solution that eats into vital engine parts, causing them to wear out years before their time. The Micro BRONZE Filter contains a patented acid neutralizer which adds years to engine life and eliminates the main reason for frequent oil changing. Micro BRONZE is the only filter in the world with a built-in acid neutralizer.

MAGNIFIED PORTION

of Micro BRONZE filter showing microscopic metal balls fused together to make a solid, but porous, filter. Micro BRONZE metal can't absorb additives, can't "channel," can't "blow," yet screens out finest particles of grit and metal which drop to bottom of filter housing as "sludge."

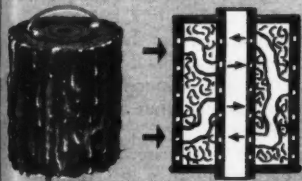


THE MICRO BRONZE UNIT FITS EVERY MAKE AND MODEL CAR AND TRUCK

You can buy a Micro BRONZE Oil Filter Unit that fits any standard filter housing for only \$6.95. Easy to install, never needs changing, never needs "filter packs" or other replacements. Micro BRONZE Filter Housing, including mounting brackets, \$9.95.

You'll save the total cost of your Micro BRONZE Oil Filter in a few weeks. You save in replacement pack costs and "the quart for the pot" you need every time you change filter packs. Most important, you save costly oil changes—with average driving, one oil change per year is sufficient.

SOLD UNDER MONEY-BACK GUARANTEE TO LAST FOREVER!



THROW
AWAY
YOUR OLD
FILTER

New Micro BRONZE Filters end forever the need to replace dirty, costly oil filter cartridges. They will outlast any car and are guaranteed for 99 years! At left is shown an old-style filter "pack"—the kind that's probably in your car now. How can a dirty pack keep oil clean? It can't—actually contaminates your oil! Illustration at right shows how ordinary packs "channel" as a result of oil pressure, allowing dirt to channel through the pack and into the oil.

THIS MAY BE
WORTH \$10,000
OR MORE TO YOU!

If you would like to be one of the people we are appointing as a MICRO BRONZE Distributor or Dealer, write, wire or phone us today. Exclusive territories with profit potentials of thousands of dollars are now being awarded. Address: Sales Division, MICRO BRONZE Filter Corp., 11766 W. Pico Blvd., Los Angeles 64, Calif.

USE COUPON NOW

Micro BRONZE FILTER CORP.

11766 W. PICO BLVD., LOS ANGELES 64, CALIF. • CABLE ADDRESS: MICRONZE

MICRO BRONZE Filter Corporation, Dept. MT-1
11766 W. Pico Blvd., Los Angeles 64, Calif.

Ship me immediately _____ Micro BRONZE Oil Filters with lifetime guarantee as follows. I understand you will promptly refund my money if I'm not pleased.

☐ Conversion unit @ \$6.95. Factory pays shipping.

☐ Micro BRONZE Housing Unit (needed where car does not now have filter) including mounting brackets, \$9.95. Factory pays shipping.

NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

MT RESEARCH road test

'55 Chevrolet V8

A new engine, exceptional handling, and many other features



In a full-power turn, it's easy to keep control. Here the Chevy shows its good maneuverability as front tire rolls under



Driving a Chevy was never like this. Wrap-around windshield is only the beginning; hood is now low, fenders high

By Walt Woron

WE'VE JUST FINISHED road testing the new '55 Chevy, and our heads are buzzing. After doing one of these road tests, it's sometimes hard to know what to write about first. Should we talk about the car's acceleration, its brakes, its handling? Or discuss its interior, its styling, its ride?

With the '55 Chevy the decision is harder than usual to make, because there are so many good features about the car. It has exceptional handling qualities for an American production car. Its acceleration is better than all but the top performance

cars of '54. Its ride is improved over last year's model. So where do you start? Well, how about at the beginning? We'll go to the Chevrolet Zone Office in Detroit, Mich., pick up the Two-Ten four-door sedan waiting for us, and go from there.

Before we get in, let's walk around the car and inspect the general workmanship. The panels all seem to fit fairly well, there aren't any ripples in the body, there's only the barest amount of orange peel in the paint. The grille will take some extra work if you want to keep it shining; looks like you'll need a bottle brush to keep each square clean. The wrap-around bumpers should protect the corners of the fenders, while the bumper guards look sturdy enough to cope with today's traffic-banging. The 6.70 x 15 tires are the new U.S. Royal or Goodrich tubeless (standard on all models).

We've commended Chevrolet for years on their clever tool tie-down arrangement in the trunk compartment. Let's see if they still have it this year. Putting the key into the lock and giving it a twist is all that's necessary for the deck to lift gently; it takes only one hand to do the trick. There's the bumper jack and lug wrench next to the spare tire, but closer and fitted into a groove that will keep

it from bouncing around. The arrangement is even better in this new version, since it makes more stowage space this way.

There's plenty of room inside the trunk (20 cubic feet of it), while the rubber mat is practical from the standpoint of durability. Metal panels on the sides are also more durable than the more-frequent cardboard panels.

Last year we said that we expected the V8 engine to "join the crammed-engine-room set." So let's take a look at this amazing engine and see if we were right. The hood release is in the center, below the chrome bar; notice that with one hand it releases, and lifts of its own accord? That's balance. Notice also that the hinge is a ratchet affair that lets you lock it into position so you never need fear that the hood will suddenly come down and whack you on the head? There's no sound-deadening material under the hood, but maybe they don't need it. We'll see.

That engine is a surprise; things are much more accessible than we thought possible. The generator is right out on top, in front. The fuel pump is low, but you can get to it and work around it. The oil dipstick isn't hard to reach, and oil filling (for you home mechanics) is a cinch. Take off the carburetor air cleaner,

Motor Trend

MT
att
of

Photo
Bob M

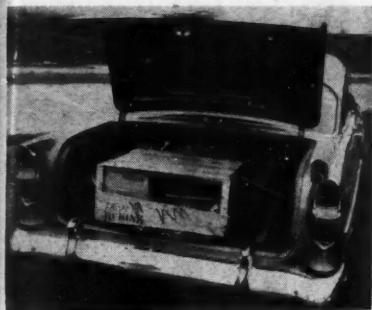
Engi
plug

and y
buret
right
station
ments
one n
exhau
them
Th
so let
wide
too. Y
inclin

REAR V
(Determin
All test
similar
Observed
atmosph
49
57
67
Max. 78

TOP SP
(In miles

January



MT's customary testing equipment (not attached in this photo) leaves abundance of room in the large trunk compartment

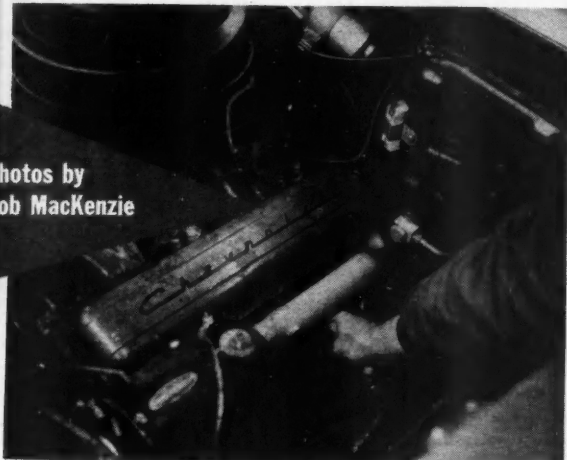


Headroom and legroom are not overlooked in testing the car. There's ample leg space with front seat fully rearward

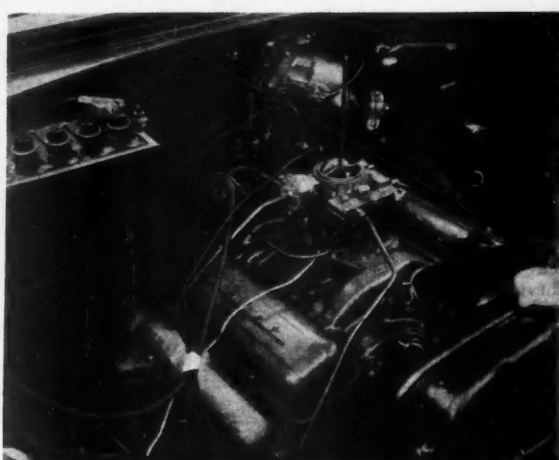


Another new feature this year is the central glove compartment, easy to reach for the driver and both his passengers

Photos by
Bob MacKenzie



Engine compartment is compact, though placement of spark plugs (below hand) is awkward, especially with engine hot



If you like to putter around your new car, or if you really take it apart, Chevy ranks high as promising weekend hobby

and you can work easily on both the carburetor and distributor. The battery is right out where it will remind the service station attendant to fill it. Valve adjustments should be easy. Plug changing is the one nasty chore; they're located under the exhaust manifolds, so don't try to get at them while the engine is still hot.

That completes our outside inspection, so let's get inside the car. Notice how wide the door swings open? Stays open, too. You'll be able to park this car on any incline, open the door, get out with an

armload of packages, and not fear that the door will close suddenly on you.

The seat seems fairly soft, yet firm enough not to be tiring on long trips. There's plenty of headroom (even with a hat on), good shoulder room and hiproom (more this year than last, in fact), and fair legroom. The seat adjusts easily enough on its track, but there's not enough movement rearward (there's only 4.4 inches) for six-footers. With the front seat all the way back, let's get in the rear seat and see how that is for comfort.

The rear doors open almost at 90 degrees to the car and stay open the same way. When you close them you can push down the button, locking the door handle so you can't open it unless you pull up the button again—not new, but still a good safety item, especially if you have young children. Notice also that the front seat-back springs are covered? That'll keep you from barking your knees and your children from hurting their hands or faces on sudden stops that may throw them against the seat. (Continued on page 56)

TEST CAR AT A GLANCE

'55 Chevrolet V8 Two-Ten with Powerglide

(General specifications on page 56)

REAR WHEEL HORSEPOWER

(Determined on Clayton chassis dynamometer. All tests are made under full load, which is similar to climbing a hill at full throttle. Observed hp figures not corrected to standard atmospheric conditions.)

49	road hp @ 1800 rpm and 24	mph
57	road hp @ 2000 rpm and 32	mph
67	road hp @ 2500 rpm and 52	mph
Max. 78	road hp @ 3200 rpm and 69	mph

TOP SPEED

(In miles per hour over surveyed 1/4-mile.)	
Fastest one-way run	97.8
Slowest one-way run	96.3
Average of four runs	97.3

ACCELERATION

(In seconds; checked with fifth wheel and electric speedometer.)

Standing start 1/4-mile	(71 mph)	19.0
	0-30 mph	4.3
	0-60 mph	12.3
	10-30 mph	3.1
	30-50 mph	4.4
	50-80 mph	15.5

SPEEDOMETER ERROR

(Checked with fifth wheel and electric speedometer.)

Car speedometer read 29 @ true 30 mph	
44 @ true 45 mph	
60 @ true 60 mph	
76 @ true 75 mph	
101 @ top speed	

FUEL CONSUMPTION

(In miles per gallon; checked with fuel flow-meter, fifth wheel, and electric speedometer. Mobilgas Special used.)

Steady 30 mph	20.6
Steady 45 mph	19.2
Steady 60 mph	15.8
Stop-and-go driving over measured course	13.7
Tank average for 1241 miles	14.5

STOPPING DISTANCE

(To the nearest foot; checked with electrically actuated detonator.)

30 mph	33
45 mph	82
60 mph	146

'55 CANADIAN CARS



Dodge Regent is salesmate to Crusader, Mayfair, and Royal lines, is sold by Dodge-DeSoto dealers. Chrysler-Plymouth-Fargo dealers complete '55 Chrysler Corp. lineup in Canadian market

Our neighbors to the north show off Detroit's counterparts at announcement time

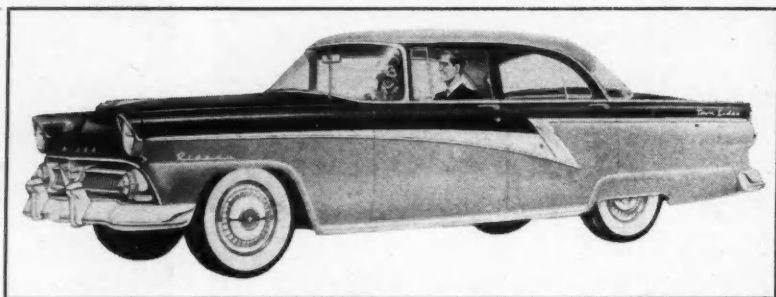
By Jim Lodge

AUTOMOBILES are just one of the many things that create a common bond between the United States and Canada. Where differences do exist between the U.S. and Canadian products, they go nearly unnoticed in most cases. But there's no difference in the excitement stirred up at new-car announcement time—be it in Flin Flon, Manitoba, or in Fostoria, Texas.

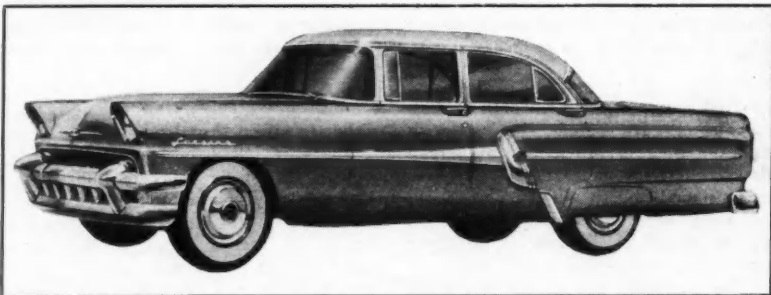
Among the early Canadian announcements are the Ford products. The Meteor, always of special interest (because the Meteor and Ford grilles are often interchanged by customizers on both sides of the border), has the same new, basic body styling as our '55 Ford. In addition, it offers three V8s—a 162-horsepower job in the Meteor line, a 175-bhp powerplant in the higher-priced "Niagara" and "Rideau" series, and an optional (with automatic transmission) 182-horsepower engine in "Rideaus" and station wagons. The Monarch for '55 (with a new luxury model—the "Richelieu") provides a choice of 188- or 198-hp engines (the latter with automatic transmissions only).

Pontiac marks its introduction with the return of a convertible to the Canadian market, and a new, two-door station wagon. Pathfinder and Laurentian models are available with 145-horsepower sixes, or a 162-bhp V8; a 180-horsepower V8 powers Star Chief and Chieftain models.

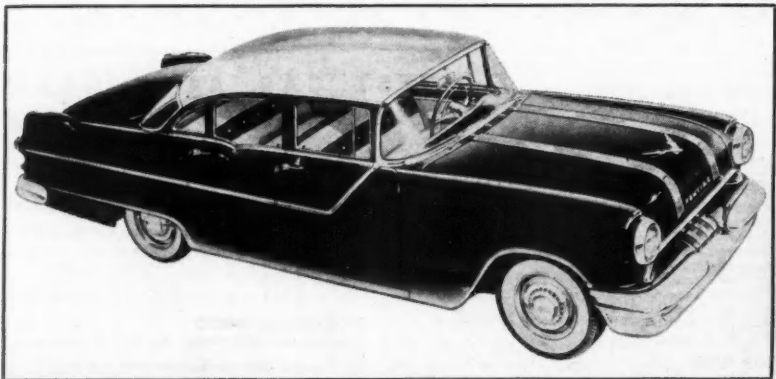
The Dodge Crusader, Regent, and Mayfair cars (corresponding to our Plymouth Plaza, Savoy, and Belvedere) are restyled and available with sixes, or, in the Mayfair, a V8. These "small" Dodges give Dodge-DeSoto dealers a car comparable to the Plymouth, sales-wise, in addition to the regular Dodge Custom Royals. Chrysler-Plymouth-Fargo dealers sell the standard Plymouth and the Fargo (Dodge) truck. Other Chrysler lines are similar to the U.S. models in style and power.



Counterpart of U.S. Ford in size, power, the popular Meteor appears with new look for '55, many power choices. Top-line "Rideau" models have 182-hp engine option



Built by Ford in Canada, Monarch adds "Richelieu" luxury model to '55 line, offers two V8s, completely new styling with wrap-around windshield, hooded lights



Canadian-produced Pontiac with GM's new look is available with either 145-hp, six-cylinder engine or 162- and 180-horsepower V8 powerplants in its '55 models

Motor Trend

He
a
bu
tal

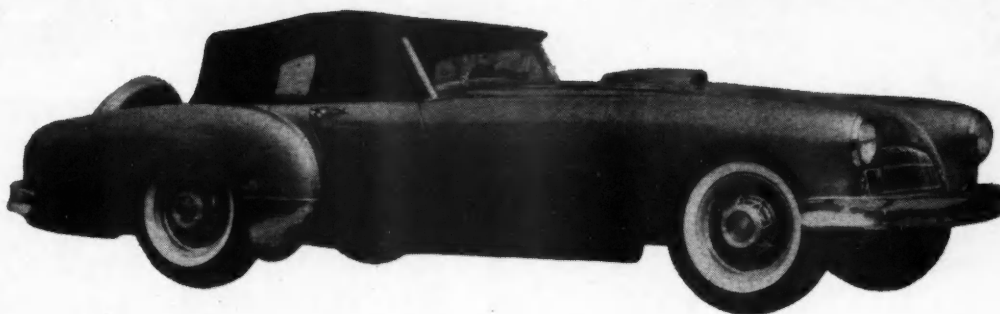
T
S

LOO
Ted C
some
rel-ho
on wh
mach
famed
metal
project
Maxw
sters"
few ye
of a
end res
the Th
be the

January

Here's a car that's been called a cross between a European-built roadster and a Continental; but it's best known as the

THANON SPECIAL



LOOKING BACK over a life that's been full of love for automobiles, Ted Ongena, of Lapeer, Mich., recalled some of his early "soap box" cars: a barrel-hoop-and-burlap job mounted on wagon wheels; then an all-wood, gold-colored machine patterned after Major Seagrave's famed "Golden Arrow"; galvanized sheet metal sheathed the next push-powered project. An account of rebuilding an old Maxwell and a Model A Ford into "speedsters" might have ended his story—but a few years ago Ted purchased the remains of a tired '39 Ford; the end result of this project—the Thanon Special—may be the start of another

chapter in his story of rebuilding cars.

The basic Ford chassis was fully reconditioned, and fitted with Oriflow shock absorbers, a 3.54 differential, and reworked crossmembers (which allowed the engine to be set back 24 inches); other basic alterations included the use of Allis-Chalmers tractor steering components to liven the Ford setup to 2½ turns, lock to lock.

Bodywise, a '37 Chevrolet sedan's top became the "Thanon's" hood, and the Chevy's trunk lid, turned upside down, became a deck lid for the new roadster. Fenders are '51 Chevrolet; the front fenders are made up of two pairs of fenders for perfect symmetry (the outside of a left fender became the inside of a right

fender, and vice versa). Body panels are hand formed and rolled to accommodate the flat-and-sharply-curved contours.

The Thanon Special utilizes parts from 11 cars, including a '37 Packard's windshield and top bows, and a '49 Chrysler's bumpers. Finishing touches are a full zip-out rear window and snug side curtains; the top and upholstery were the only jobs farmed out to professionals.

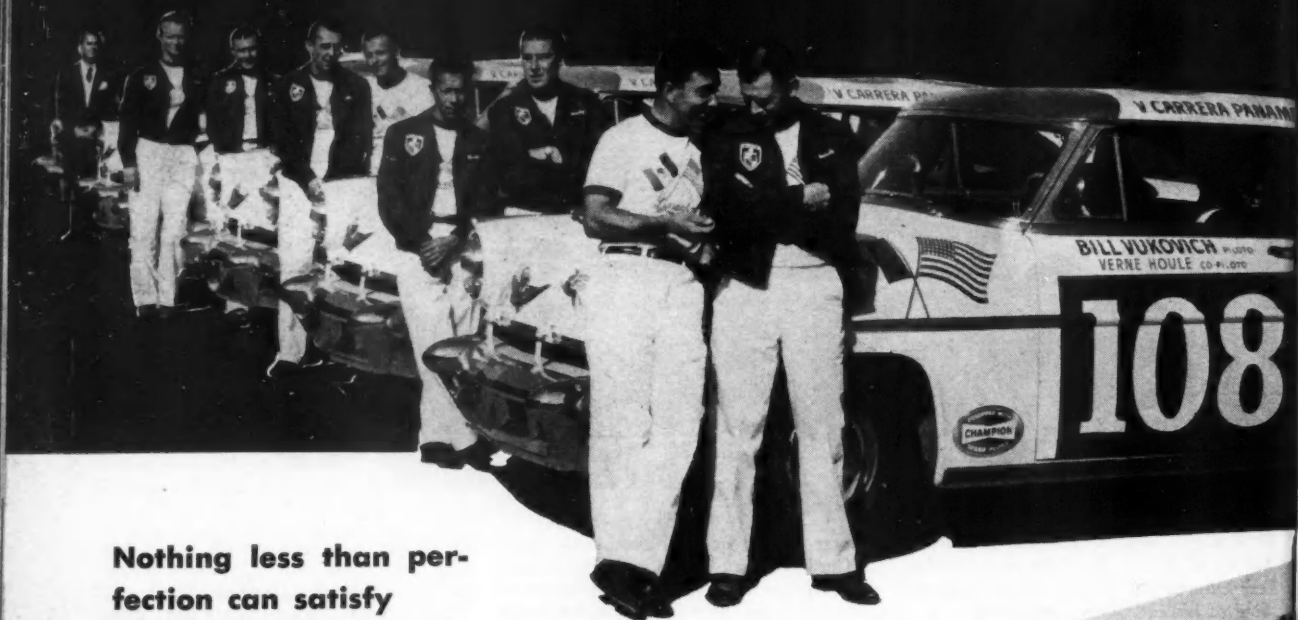
MT's Detroit Editor, Don MacDonald (whose wife, Teddy, graces the roadster in these photos), tells us that by presstime, Ted Ongena's car may have a late-model Oldsmobile engine to replace the well-souped (overbored, ¾-race camshaft) '48 Mercury block now powering the car.



Photos by Bob MacKenzie

with the

Lincolns in Mexico



Nothing less than perfection can satisfy Lincoln's factory team when the question is "Ready for the Race?"

By Pete Molson

MEMO from Walt Woron
To: Pete Molson, Motor Trend
c/o Robert W. LaMontagne, Jr.
Comite Nacional de la Carrera
Panamericana
Av. Cuauhtemoc No. 242
Mexico 7, D.F.

Dear Pete:

First of all, I hope your trip to Mexico City was enjoyable and not too tiring. We didn't get much chance to discuss slant on this story, except in that phone conversation, so here's a reiteration:

1. That MT would like to see more factory-team competition in the road race, for the good of all companies, and particularly for the good of the motoring public.
2. That behind-the-scenes cooperation is not enough. It takes factory cooperation like that given by Lincoln to make it really count.
3. That just because Lincoln has won three consecutive years is not reason for other companies to become discouraged, or to feel that Lincoln has it all "wrapped up." They would



Chart on Bill Stroppe's office in Long Beach shows all trip details, plan for service strip at end of each day's leg

To:
T
19th
rez,
truck
nine
two
El P
co's
mind
and a
life c
whom
appea
in L
long
neigh
ent I
shoot
Th
a low
busin
trim
Strop
its ya
No v

Here's
crew a
change
January

(officially) like to have some competition.

4. That it doesn't take unlimited resources to run, but that it takes a percentage of what you want *out of it*, regardless of what that amount is. It's an investment in publicity, in knowledge, in experience.
5. That Lincoln isn't the *only* organization that can prepare their cars the way they do, but if anyone is to win (or even to run sensibly) they can take a few pages out of Lincoln's book.
6. That what it takes is months-long preparation of the cars, of the pit crews, of the drivers, of preparing for any eventuality, of training over the road, plus luck—and lots of it. Best of luck. I envy you.

Cordially,
Walt

MEMO from Pete Molson

To: Walt Woron

This story begins way back, not on the 19th of November in Tuxtla Gutierrez, nor on the first of that month as five trucks and, on the backs of two of them, nine race cars (seven Lincoln hardtops and two Ford coupes) crossed the border from El Paso, Tex., to Ciudad Juarez, in Mexico's State of Chihuahua. It began in the minds of the big men at Lincoln-Mercury, and as much as 20 years ago in a way of life chosen by four dozen rugged men for whom racing *is* life. It began in a modest-appearing but superlatively equipped shop in Long Beach, Calif., whose staff had long been known to the Ford Motor Co.'s neighboring assembly plant and to its parent Detroit office as the best trouble-shooters in the business.

The shop is one you would never notice, a low, typical Southern California small business building, looking a little like a trim suburban house. Its owners are Bill Stroppe and the late Clay Smith. Behind its yard gate and the friendly "Please! No visitors until December 1—time is

short!" the organized hassle stretched farther into each night, both helped and hindered by the knowledge that Lincoln had won twice before and that a lot of people were waiting for it to win again. Most of the public knew little of what winning a race involves, but that actually meant little: the thing to do was to win, not explain why they hadn't. Paradoxically, where painstaking preparation was the largest ingredient in victory, it would carry no weight whatsoever without an outright win.

Let's take time out for some of the theory behind all the seemingly frenetic (but actually cool and collected) activity in Long Beach. The name of Lincoln has acquired that winning sound through a series of hard-headed steps. The first was one of the legacies of Henry Ford. As any amateur rich man knows, you can't buy shares in Ford (in 1954 there was a brief flurry of rumors to the effect that you soon could, but it remained just rumors). This single fact of life has written more chapters in the Decline and Rise of the Ford Empire than there are in the accounts of half a dozen stodgy stock companies put together. A stock company is obliged to show a profit, and the only way it can do so is by selling the public what it wants. But when Ford wants to go on making Model Ts 'til doomsday, or wants to introduce a V8 at a singularly unpromising point in U.S. economic history, it's a free agent. And, in plain talk, if it wants to spend a lot of money trying to win a still-obscurer, 2000-mile race against frightening opponents and over appalling terrain, it doesn't have to answer to anyone. So Lincoln, incredible as the fact may seem to the factory drivers of Lancia, Mercedes, or Alfa, had the only true factory team from our reasonably prosperous country.

To be sure, other U.S. factories helped the entrants whose cars bore their names. Test and research facilities were at the disposal of loyal drivers in a sort of lend-

Chuck Stevenson shows how only slow movements will make safety strap yield



Driver attaches to belt, which attaches to roll bar, which bolts to the floor



Chuck flips one buckle which obligingly releases both belts in case of emergency

Photos by Tom Medley and Pete Molson



Here's an impromptu view of the Lincoln crew as they prepare for a practice tire change. Note the electric lug wrenches

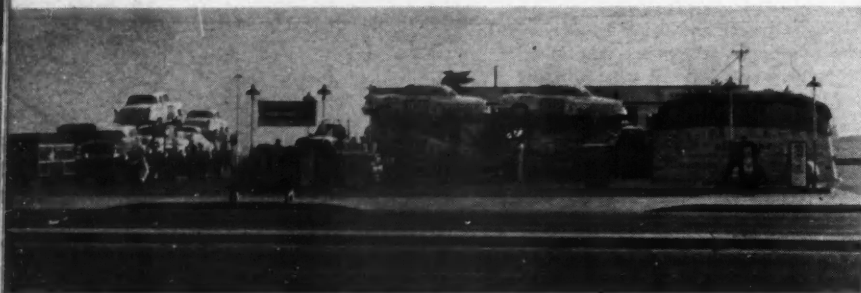


Here pilot and co-pilot begin the job, aided by a power jack which works off an air tank visible at the lower right



Leaving a wake of dust, they take off exactly one minute, 48 seconds later, with both the left and right tires changed!

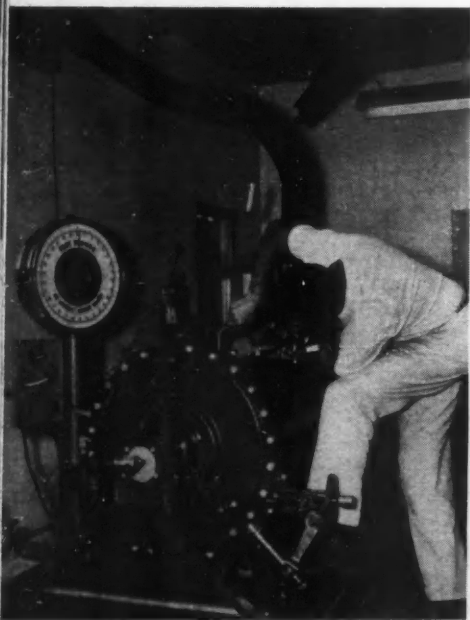
WITH THE LINCOLNS IN MEXICO continued



Caravan consisting of five trucks (two of them carrying seven Lincolns and two Fords between them) pulled into this Mobilgas station in Long Beach before leaving



Neat stacks of toolboxes are always kept on hand by crew. Color of service kits corresponds to color of its assigned car



An engine dynamometer in the Long Beach shop. Don Francisco, formerly of Hot Rod Magazine, checks it

lease arrangement, almost as though the factories would rather not win. (Some bitter would-be winners preferred to call it "too little and too late.") What it takes is just what Lincoln offered: an unstinting, flexible contract with a thoroughly proved outfit to see that the cars are in the best possible trim on race day, that every modification possibility is explored, that not a nut is left unturned to make each car a potential winner. It requires a generous hand with many thousands of dollars, though the sum was not a large one in terms of investments. It takes money available for *everything* that's needed, and in as mercuric an art as racing, a cold *cerveza* (beer) for the guy who has just changed a truck tire can be just as vital as the proper-sized end wrench. It takes a thoroughgoing awareness that you have to get ready to win: luck, mumbo jumbo, or prayer won't make it so.

Now, Lincoln, aware of what can happen on both sides of the ledger, takes a calculated risk. Publicity-wise, the '54 win was tremendous. The possible loss of

the '54 race had to be borne in mind, for the U.S. car-buying public is quick to forget a favorite. But Lincoln had no choice in the matter; failure to enter would have been worse than losing, and could not be considered. Actually, Lincoln wants, and will continue to want, close competition. The fact that Chrysler won in '51, came close last year, and was serious (if not serious enough) about its '54 entries made it the biggest and most threatening of bogeys. At no time was its presence treated lightly, and it was an eye-opener to see these experienced drivers and mechanics carefully estimating their enemy.

This estimate began with the anonymous purchase of a new Chrysler, which Lincoln carefully tore down and inspected, bit by bit. Frame, suspension, Power-Flite unit, all came under the magnifying glass and made possible an estimate of the car's behavior in each contingency up the 2000-mile length of the course. Can a Chrysler corner as well as a Lincoln? "Not in stock form" is a quick and easy answer; but what happens when permissible safety modifications are added? I watched one of the Lincolns scorch the fantastic road south of Mexico City; I was a very few feet in front of it (in Johnny Mantz's Lincoln, No. 104) and it leaned not at all when going through sharp curves at 60 mph. MOTOR TREND's readers know that stock Lincolns corner among the best U.S. cars, but only a fanatical devotee would claim that they go through such hair-raising spots *with no lean at all*. I didn't see the Chryslers in the uneasy (for me) performance, but it's a cinch they behaved differently from their boulevard counterparts.

Let's consider, then, what could happen. A Chrysler is ahead of a Lincoln, say, going into a turn. The Lincoln driver knows approximately what the Chrysler can de-



Two-way radio equipment in the back of Chuck Daigh's Lincoln made it possible for the caravan trucks to communicate



Bill Babbitt welds a hood-latch with portable equipment taken along in truck. Note the bottled drinking water in rear

Motor Trend

liver from his study of its transmission and from its roadability, and of course he knows his own car even better. If the Chrysler swings wide on a turn, an experienced Lincoln driver can charge through the hole and be out in front while someone else would be wondering just what to expect from the car ahead.

Let's go into Clay's and Bill's shop and see what makes it work. For the cars' heart, there's an engine dynamometer room, no small investment in itself. Making sure that a car is in tip-top health is tricky with a dyno, but the important point is that it can be done with it, and not as well without it. Almost any man, driver or mechanic, on Lincoln's team can cock an ear from the front seat of a car and hear a slight unevenness that you or I would never detect, but the dyno can go farther than this: from long experience, testers like Don Francisco (formerly of MOTOR TREND's sister magazine, *Hot Rod*) know what kind of dyno reading they should get from a perfectly balanced (though stock) engine, and they're satisfied with nothing less. When an engine is running right, and only then, it's dropped back into the chassis—to do its part in pulling the Lincoln team to its scheduled victory. (A dynoed Lincoln engine even pulled one of the race car transports, insuring its efficient performance in getting the team to the starting line without mishap or delay.)

Out in back of the office, behind an unimpressive board fence, was the tire stop, set up for practice exactly as it would be at the super-efficient spot near Tehuantepec, south of Mexico City. It was Saturday afternoon when I first saw this, but a purely workaday feeling filled the air. The drivers took turns roaring around an improvised dirt track and sliding in for a stop on metal tracks, buried flush with the ground. (Once Bill Vukovich, in an ex-

cess of enthusiasm, dug the whole assembly from the ground and it had to be installed again.) Out leaped the co-pilot (while the driver settled the front tires into their grooves) and flipped the air valve to operate the jacks, which had previously been centered precisely under frame crossmembers. A replacement tire, complete with balanced wheel, was propped up near each corner of the car; electric lug wrenches lay handy to each wheel; each new wheel had a lug hole daubed with white paint corresponding to a lug similarly marked. (Balance was exact, and not to be marred by doubt as to where the lug went.) Round and round the crews went, narrowing their time, spotting the danger points that could cause trouble. "One minute, 58 seconds!" the timekeeper called, and while I watched, subsequent crews cut this by 11 seconds, and later, practice brought it down still more.

Next (and all in the same dusty rear lot) came a performance like a "Medic" show; in this case, a Lincoln was the supposedly ailing patient. Each car was assigned a characteristic color (orange, purple, or whatever) though the body color of all the team cars remained white. In the dust was unrolled a snowy cloth; on it went the tool box for the car in question (it, too, was "color-keyed") and from it, mechanics took the tools, to be spread out on the cloth. In this dramatic manner, each car would be serviced at the end of each of the five days' run. On the actual caravan from Long Beach down to the starting line, the crews would inspect the service areas so they could know every move during the race; and before they even saw the actual strips, detailed plans of all of them—Oaxaca, Mexico City, Durango, Chihuahua, and the extra tire shop—hung on the wall in Bill Stroppe's office for study. (Continued on page 58)



In Oaxaca, mechanic works on shock absorber and brake. As usual, a neat, operating-room-like condition prevails



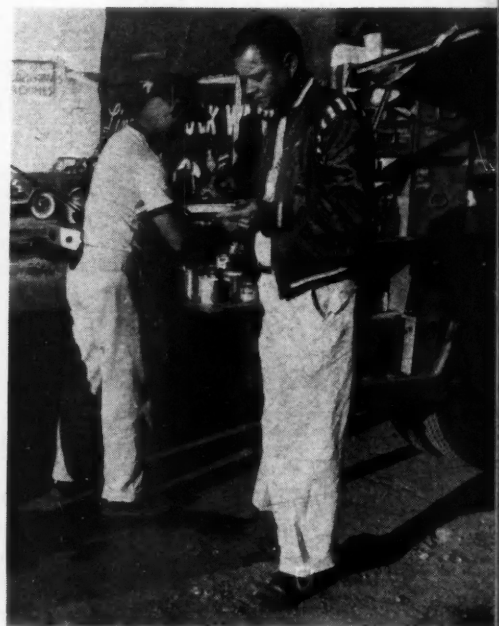
Scene: Oaxaca, after practice trip from Mexico City which showed up snags in suspension, brakes, shock absorbers



Radio mike and auxiliary instruments in Chuck Daigh's sedan used for testing the course and general Lincoln behavior



Interior of a race car shows footrests for driver and co-pilot. Note big tachometer, pressure and vacuum gauges



Voilà! Gordon Smith cooks on a butane stove set on tailgate of the chuck wagon. Max Ellis is the chief bacon tester

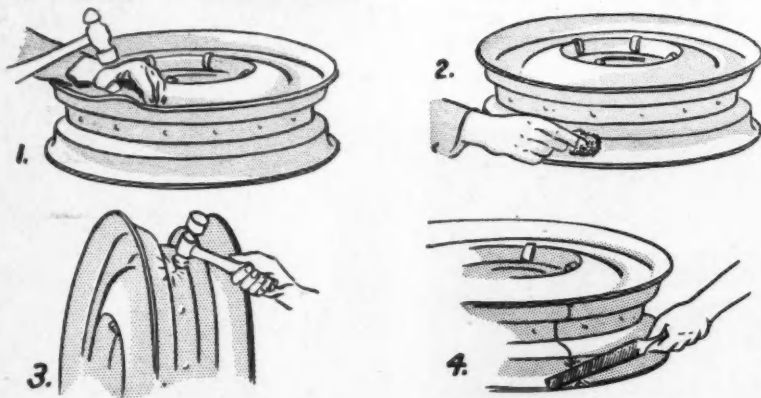
REPAIRING TUBELESS TIRES

"DO IT YOURSELF"



Goodyear's shop-size kit (larger than consumer kit) illustrates equipment being introduced with tubeless tires. Kits are relatively inexpensive, have cement, plugs, needle

PREPARING THE WHEEL



- 1 Rim flanges must be inspected carefully, straightened wherever necessary. Flange supports the tire bead and must provide clean, airtight bond
- 2 Steel wool can be used to clean flange of oxidized rubber, other impurities; wire brush will take off rust. Wheel center need not be smooth
- 3 Use a ball-peen hammer (with another hammer underneath) to tighten loose rim well rivets. Coat with rubber cement if rivet can't be tightened
- 4 Groove or high spot in rim butt-weld will allow air to escape. File weld ridge to a flat, smooth surface. File off burrs around valve hole

THE MIGHTY EXTRAVAGANZA evident in the development and sale of tubeless tires has not, fortunately, overshadowed the normal plights of the tire-buying car owner. As pointed out in this display of repair methods, oil company publications and tire, battery, and accessory trade journals are educating the service man to the ins and outs of the tubeless tire—which means better service to you. In addition, the tire companies supply owner's manuals with their tires, and even if the owner never even changes a tire after reading his booklet, he'll at least be familiar with the mounting and repair procedures peculiar to his tubeless tires.

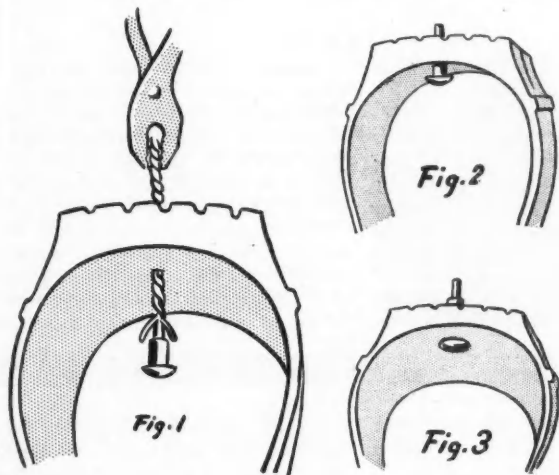
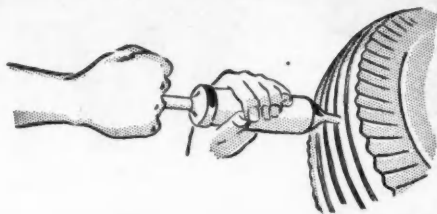
B. F. Goodrich, Goodyear, and U. S. Rubber, for example, explain through drawings similar to these how to prepare a wheel for mounting a tire, and other pertinent service tips. They caution against the use of hammers and tire irons to break the sealing bead when removing a tire, and they illustrate proper repair methods for various tire injuries. Hot patch and cold patch repairs (for larger punctures) are best left to qualified repairmen with specialized equipment.

Follow the manufacturer's suggestions for using rubber lubricants, cements and wheel balance weights; and, of course, you should adhere to his recommendations for inflation. Although the tubeless tire may be easier to remove and replace on the wheel (there's no tube to be pulled or pinched), follow proven procedures and precautions to make the job a good one—and an easy one.

Don't mistreat the, all-important bead around the rim of the casing; the valve should also be handled with care; keep your fingers free of the rim when inflating the tire, for the bead often snaps into position against the rim with a powerful, finger-smashing impact.

GUN METHOD

AVAILABLE FROM U. S. RUBBER, other tire producers, the sealant gun can be used to fill small punctures. After locating leak, wipe tire dry, and reduce air pressure to five pounds before using this method. Gun is held against the puncture, plunger pushed or turned enough to inject sealant material into hole. Let tire stand about 15 minutes before reinflation, then be sure to test the tire in a water tank.

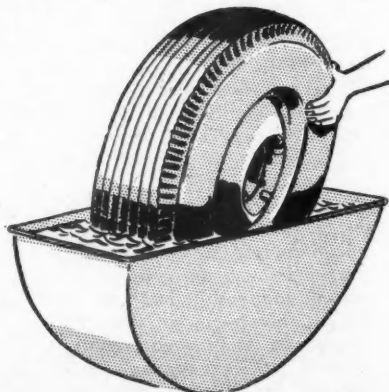
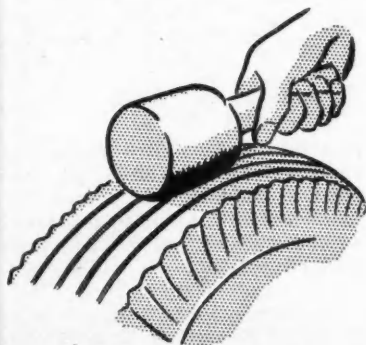
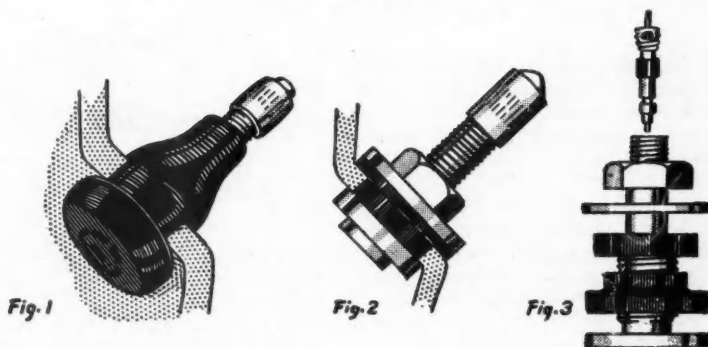


RUBBER PLUG METHOD

B. F. GOODRICH REPAIR KIT includes plugs with double-thickness stems for different-size punctures. Hand rasp is used to clean hole; rubber solvent cleans surface around the injury. Plug is coated with rubber cement and inserted from inside (Fig. 1); small section can be used (Fig. 2), or plug can be pulled flush (Fig. 3) to fill holes up to 1/4-inch in size. The plug is cut off flush with tread surface, and when inserted only to first shoulder, trimmed 1/4-inch from inside casing surface. Plug provides compression fit when properly installed, and should be stretched into position to insure a permanent, leak-proof repair.

TIRE VALVES

REPLACEMENT VALVES, a feature of the tubeless tire, are illustrated by these Dill valves. Snap-in type (Fig. 1) is mounted after tire is removed. Clamp-in valve (Fig. 2) can be mounted from outside, with tire on wheel. Exploded view (Fig. 3) of Dill valve shows rubber washers used as seals between tire and rim.



TESTING THE REPAIR

IMPORTANCE OF PROPER ASSEMBLY and testing is stressed in Mobilgas dealers' brochure and by trade journals like *The American Automobile*. Tire must be seated firmly on wheel for airtight fit. Whole wheel is tested in water tank for signs of leaks at the repaired spot, tire bead, or the valve assembly. Bubbles may come from leak at damaged spot at wheel rim, possibly from loose rivets at drop-center flange.

Illustrated by George Wallace and Don Fell

What would

YES, HOW WOULD YOU REACT to a skid, a blowout, a broken steering gear? Here's how three noted race drivers—men whose lives continually depend on split-second decisions—have trained themselves to do it.

How many times in the past year or so have you been an accident statistic of the American Automobile Assn.? Roughly one out of every 25 cars in the U.S. was in an accident serious enough to be listed by the insurance statisticians. There is no

record of how many other minor mishaps occurred.

There were 5710 people killed in 1953, last complete year for which statistics are available, because someone was driving on the wrong side of the road. There were 2420 dead because someone didn't know the laws regarding right-of-way. And the catch-all of incorrect speed sent 13,780 to their graves.

But the injury figures show even more how poorly Mr. America handles his car:

Exactly 429,050 people were hurt in right-of-way accidents, 60,340 more in accidents where someone cut in sharply, 145,000 in wrong-side-of-the-road mishaps, 66,990 in cases involving improper signals for turns, and 670,000 where someone was driving at an improper speed.

With figures like this staring you in the face, it takes real bravery to get behind the wheel of the family auto. Obviously, even the so-called cautious driver must be in danger when cut-ins, bad signals, and



1. You are driving in medium traffic, weather conditions and visibility good, on a two-lane road. What would you do if you encountered a faulty steering condition?

Frank Mundy: The first thing I would do is hit the brakes and stop as soon as I possibly could without endangering the cars behind me. If I saw I was going to crash and couldn't avoid it, I would get down out of the way of the steering wheel. The main thing is to slow the car.

Duane Carter: I would get off the throttle. Then I would apply the brakes at once, even if the car turned. There's no alternative but to stop the car. It stands to reason you are less likely to hit something the shorter distance you go, and if you hit something slowly it is likely to do less damage. Usually the steering doesn't go bad all at once, and you get warning when you have to oversteer. When this happens, I get off the road or the track. Even if it's only my wheel alignment I get it attended to fast.

Briggs Cunningham: I've never been in a car where the steering failed completely. I suppose I would try to slow it down, either with the brakes or with the transmission. If I thought there was any possibility of not stopping in time, I would duck down and away from the steering wheel. Steering failure is the result of

sheer negligence on the part of the car owner. Anybody can feel if his steering is not right when he has too much play in the wheel and has to work too hard to turn it.



2. What would you do if your brakes failed?

Frank Mundy: My first move would be to get the car slowed, even in medium traffic. I've shoved the gear into second or low to let engine-braking help, and, when possible, I've steered for the side of the road. Here's where bumper chasing can cause trouble. Time after time, driving to and from race tracks, I see guys sitting on the car in front of them at 50 to 60 mph. I think what would happen if their brakes let go. It would start a chain reaction crash. I think shoulder harness safety belts could save a lot of injuries in this type of emergency. If you can't avoid hitting something, the harness may save you and your passenger.

Duane Carter: When my brakes fail, I get off the foot throttle and steer for the side of the road. If this isn't possible I decelerate through the gears on a straight transmission, push it into LOW in an automatic. Sometimes, if you pump your brakes, you find enough pressure to help slow the car. I was driving someone else's car once in fast traffic, when the brakes went. I could have swerved to the left

into the oncoming traffic lane, but I think I did the right thing by risking smashing into the guy in front as I slowed down. Luckily the traffic kept moving and I was able to get the car off the road.

Briggs Cunningham: At least, when the brakes fail, you still have some control of the car. I would try to steer to avoid hitting other cars even if it meant bouncing the car off the curb or a fence. In sports car racing you can bounce the car off a hay bale. It gives you a lot more confidence when you've done it a couple of times. You lose your fear of speed when you know you can walk away after misjudging a turn. Yet when you hit your turns, you're more careful because you realize you can be out of it with inaccurate cornering. In an American passenger car, I would also grab the emergency brake. Sometimes pumping the brake pedal helps matters, too.



3. A turn in the road is sharper than you expected and you take it fast, throwing your car into what amounts to a four-wheel drift. Assuming good weather and visibility but medium traffic, what can you do to control the car?

Frank Mundy: When I was driving for Jimmy Lynch and the Death Dodgers, I learned a little trick that helps in any situation like this, where you have to use the gas pedal and brake practically at

What do you do?

the like are accident causes. What you would do in an emergency thus becomes of increasing importance the more you use a car. So MOTOR TREND went to the men who must know how to drive to stay alive—three of the nation's top competition drivers—to find out what they would do in emergencies which occur again and again.

Their answers and their tips may save you anything from a crumpled fender to your life.

once. I keep my foot on the gas; then with my left foot, I tap the brake, steering into the drift. This stops the chance of a spin, changes the caster and helps pull the car in a controlled slide. The nose of the car stays down, too.

Duane Carter: I steer into the drift, accelerating slightly. This happens all the time on the race track, and there a controlled drift can get you out of tight spots. I've never done it on the road in a stock car, and I wouldn't, because a stock car isn't balanced for such a technique. Also the rear end is much too likely to break loose, and if it does, you're in trouble. Then you'll spin so easily, you'll think you're an airplane.

Briggs Cunningham: Here's where it pays to know exactly what your car's transmission will take. In a stock car it depends on road conditions, but it's a tough proposition with a front-heavy car. Never put on your brakes. You can downshift to low or second, and hope you will catch the drift before the rear breaks away. Sometimes, when you feel the wheels biting, you can increase power and drive out. At other times the best thing to do is to get under the cowl and off the gas, letting the car go into a field.



Frank Mundy (top), pride of Atlanta, Ga., has been a top stock car driver for years. He won the AAA national stock car championship in 1953. **Briggs Cunningham (left),** Greens Farms, Conn., man behind the famous American sports cars, has successfully raced all over the world. **Duane Carter, Speedway City, Ind.,** is one of the toughest top-flight competitors in Indy-type racing

By Bob Fendell

Illustrations by Dick Day

4. You are driving on an icy or rain-slick road and you feel your car start to skid. What do you do? And what if you are skidding into a line of traffic?

Frank Mundy: You turn into the skid, using a pumping action on the brakes. Never jam them on. In traffic I would let myself slide around the car in front, or look for a hole to go through. The idea would be to minimize impact.

On any wet or slippery road I use my brakes sparingly, just going slower than usual and trying to anticipate trouble. In accidents like this, it's the passenger who gets the worst of it.

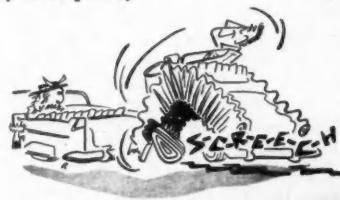
Duane Carter: When I drive on icy roads I keep off the brakes as much as possible, try to drive without sudden spurts. A steady pace will forestall skids. If I start to skid, I steer into it gradually.

The steady pace with a minimum of stops is a real test of how good a driver you are. It pays, of course, to start from traffic lights slowly and gradually.

Briggs Cunningham: This is like the drift on a dry road. I steer into it, get into a lower gear, don't touch the brakes. With power brakes, this is particularly important. If the power brakes lock, there isn't much you can do except pray and duck.

It's all a matter of foreseeing these conditions. You know it's dangerous if the road's wet, so you drive "ahead of your-

self." You have to watch everybody on the road; if a reckless one comes along, you try to keep away.



5. You are driving in a line of traffic and the car ahead makes a sudden stop, so quick that your brakes may not stop you in time. What can you do?

Frank Mundy: Not much. It's a case of reflex action if you're following that close. A good thing is to keep that left foot near the brake. It's clumsy at first, but you get used to it. A way to avoid these sudden stops is never to take it for granted that another driver has given a correct signal until he actually turns. Too many give wrong or sloppy signals or change their minds.

Duane Carter: I would swerve to the right if there were no traffic, but never to the left, because there might be oncoming traffic. Usually it's the slowpokes who cause most of these accidents. They get too cautious and jam the brakes every time an insect flies across the windshield.

What would you do?

continued

Briggs Cunningham: Try to steer around. This is another case of judgment. If you can't steer around, pump the brakes like mad and pray. It helps to have a good lawyer then, too.



6. What can you do if your vision is suddenly obstructed, as by mud, an insect, a paper blowing across the windshield, or a water splash?

Frank Mundy: Slow down, hold the wheel still. If it's a bee or a hornet, don't fight it until you stop the car. If a paper blows across your face (while you're in an open car) put your knee up to steady the steering with one hand, while you take the paper off. With mud and water I just keep driving, but slow down.

Duane Carter: I would keep going, slowing down gradually if it's a splash of water; maybe start my windshield wiper. I wouldn't jam the brakes: if there's water and mud around, I might skid. If it's a solid obstacle like a piece of paper, I'd try to stop as soon as possible.

Briggs Cunningham: Get the car slowed down. Usually you can see outside if it's mud or water, but once, in Italy, my hood opened and blew back on me. I got the car stopped just on the edge of a cut. You have to keep your head in this kind of emergency just as in any other kind.

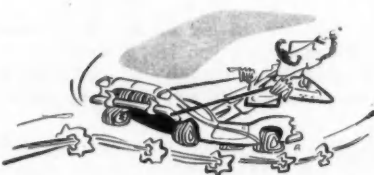


7. What can you do when you get a blowout?

Frank Mundy: A blowout, even at 50 to 60 mph, isn't too dangerous if you keep your head. If it's in front, you've got the steering and the power of the rear to pull you through. Use a pump action on the brakes and steer into any slide. If it's a rear tire, turn into the slide and pump your brakes. The back will dig in and help slow itself. The important thing is not to panic.

Duane Carter: It depends on what's in front of you. Always ease off the accelerator and try to get off the road. Use the brakes lightly, because they'll lock. The bad wheel will twist and grab, but keep the car steady at all costs.

Briggs Cunningham: There's no real danger if you stay off the brakes so that the wheels won't lock. In our sports cars, the centrifugal force keeps the tire on and we can slow down and get into the pits. The car tends to slew off, but you can over-correct in the direction of the trouble.



8. You are driving at highway speeds (at least 50 mph) and someone suddenly cuts you off, then decelerates. There is medium traffic on a two-lane road. What can you do?

Frank Mundy: Give way. Back off. Pump your brake. If the guy turns, turn with him. If you're going to drive fast, you've got to be twice as alert and use twice as much judgment.

If you're going to pass a car, do it the easy way. Back off and see if you can pass safely. Then, because you have room, you can accelerate and pass quicker. This stops "cowboys" (those who try to race you) before they can get started.

Duane Carter: Get off the accelerator. Give him the right of way even if he is a road hog. Stay away from him, because he's the type of driver that causes acci-

dents. If the cutoff is too sharp for you to slow down completely, you may have to hit the guy who cut in. It's better than swerving into people or cars to the side which would be a more dangerous crash. **Briggs Cunningham:** Pump the brakes or swerve if you can. Sometimes it's better just to follow him into his turn. I was driving an antique car with two-wheel brakes when the car in front of me suddenly cut off. I had to follow him right up his driveway to avoid hitting him.

Going fast isn't the main factor in road accidents. Poor judgment and outright discourtesy cause more accidents by far.



9. Do you have any general rule or attitude by which you drive?

Frank Mundy: I try to use anticipation. I look a block ahead to watch what the car in front of me will have to do. I always give the other fellow the chance to pass, try never to lose my temper. I also think if salesmen and others who go on long trips would use safety harnesses, 90 per cent of the bad accidents could be minimized or averted.

Duane Carter: I have two general rules. Whether on a track or on a highway, always give the other fellow "racin' room." And I never crowd the car in front of me. If the courtesy of the track were observed on the highway, we'd have a lot less accidents.

Briggs Cunningham: Naturally, I feel safer in a race because there's more chance of trouble on a public road. I think we could reduce accidents by just giving the other guy a break and using some common sense. Don't underrate American drivers. We're just as good as the Europeans and our passenger cars are, too. It's just that we've got to realize that we get into a car to go from one place to another conveniently and safely. And there are a lot of people on the road trying to do the same thing.

International

MOTOR REVUE

By Jim Lodge



SEEING IS BELIEVING. That's fairly infallible logic, but visitors to the Fifth International Motor Revue and Motorama in Los Angeles will be happy to argue the point with anyone!

We heard "Is it really gold?" when showgoers viewed Jim Skonzakas' plated Lincoln; and many onlookers — mostly the women — were awed by a certain black Cadillac convertible upholstered with leather piano keys and candelabra. Al Williams' Ghia-built Alfa-Romeo, and cars like Jay Johnston's reborn '49 Ford, and a concours-winning, custom Triumph sports car drew gazes and gasps from custom fans and average motorists alike.

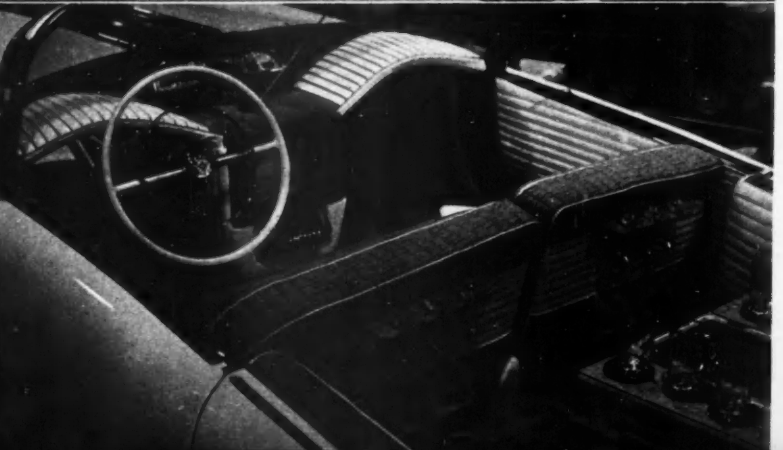
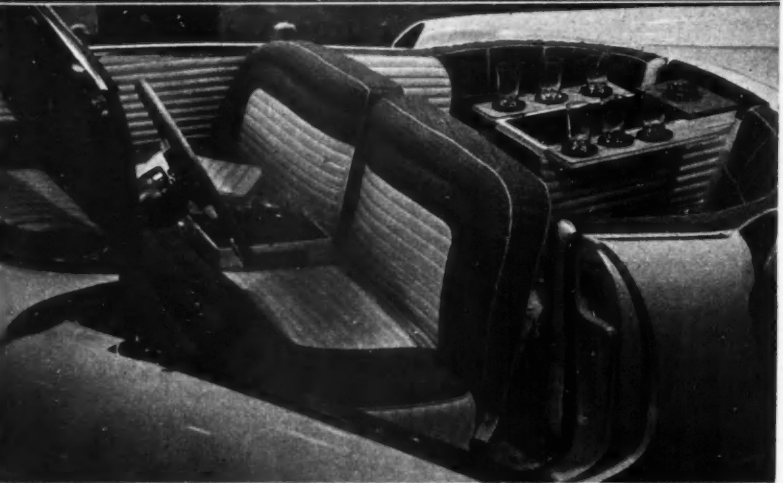
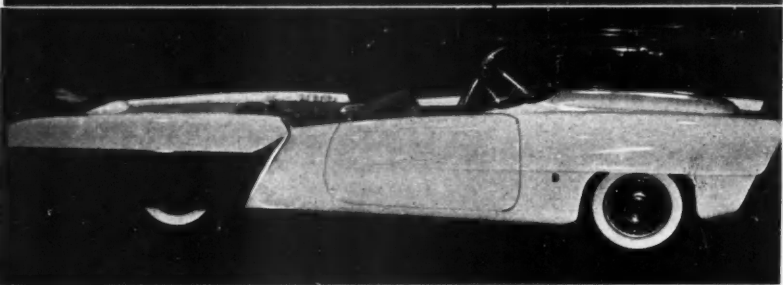
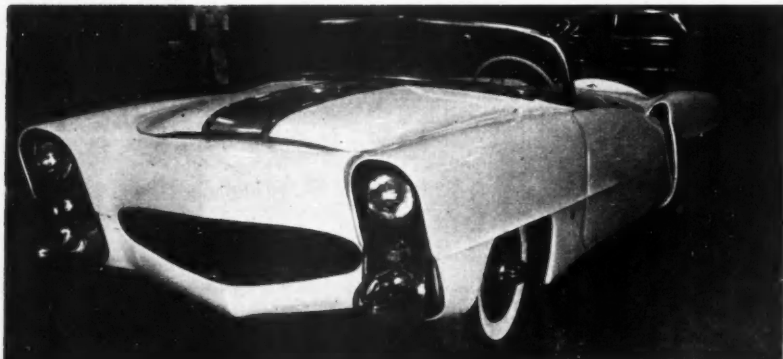
MT was on the job opening night to bring you this sparkling sampling of an automotive spectacular — the year's greatest display of customs, sports cars, hot rods, motorcycles and "specials" of every shape, size, and description.

IT TAKES more than an out-of-the-ordinary car to fit into the fascinating surroundings of San Francisco's Nob Hill — and Al "Papagayo" Williams has just the car. The famed restaurateur and owner of the exotic Papagayo Room of the Fairmont Hotel high atop "The Hill," drew up his wants and wishes and sent the order to Ghia of Turin, Italy. The result (built on an Alfa-Romeo 1900 chassis) is something to behold; a gleaming metallic-gray, hand-crafted aluminum body, with a red-and-white leather interior. We're curious about the "Carrozzeria's" reaction to Al's specifications for a seat for his Great Dane. The dog wasn't about to be left out of the act — so there's a special "seat" (with plastic covering) for the noble canine behind the front seats. The car is valued at \$22,800, and the owner is "still trying to figure out that excise tax!"

Photos by Tom Medley

CONTINUED ►

Photos by Tom Medley



FIRST OF ALL, it is—or was—a '54 Lincoln. From there, you can visualize Jim Skonzakas' car by conditioning yourself to the fact that aside from the white paint job, everything is gold plated. Everything. The \$100 hub caps, the body trim, bumpers, dashboard, and even the ashtray mounted on the bar—all gold. Valued at \$25,000, the show car has a television set, a tape recorder, a telephone, and a P.A. (loudspeaker) system. The Barris-built, Carson-trimmed "Golden Sahara" has an air conditioning-refrigeration unit (it even produces its own ice cubes); the rear fender trim is gold-dyed aluminum with a brushed-satin finish. Hood and deck have hydraulic lifts, and of course, all available power assists for comfort and easy driving are included. Engine is a 300-horsepower, McCulloch-equipped Lincoln with a 12-volt electrical system.



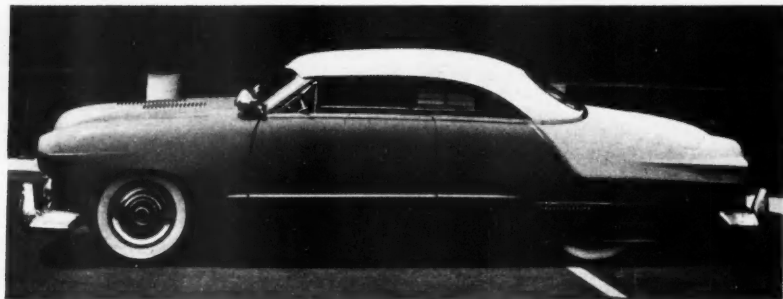
IN CASE you didn't recognize the owner by his trademarks, we'll say the word—Liberace! This '54 Eldorado isn't just fitted with fancy black-and-white seat covers; each key, the candelabra and candles, and each spark of red flame is leather—sewn separately and inlaid in a contrasting leather background. The lengthy, jet-black Cadillac is otherwise stock, except for a side-mounted plate bearing the owner's signature inscribed above chromed candelabra! The Barris Kustom Shop and Glen Heuser of the Carson Top Shop (Lynwood, Calif.) collaborated on this unusual-but-entertaining custom job.





Photos by Les Nehamkin

THE BEST description of this customized Triumph TR-2 is an account of its feat at the '54 Santa Barbara, Calif., road race: In a field of 58 cars (some worth over \$20,000), the reworked sportster took home not only first place in its class, but the "best-overall" award as well, in the post-race Concours d'Elegance. (And since then, Leonard Greenstone and his partner Harry Rudelson find their custom TR-2 an invaluable publicity aid in their Los Angeles building contractor business.) Designer-builder Vince Aldrin fitted a hand-made grille into the stock Triumph's tunnel opening (see photo at top), installed tubular bumpers, moved the headlights back four inches, and removed the tail lights, repositioning them at the base of the rear deck. The windshield was peaked, the door line raised five-and-a-half inches, and the area behind the cockpit enclosed. The instrument panel is scrolled and plated, and the interior is fitted with aircraft-type seats. Paint is 20-coat "Midnight Bronze" lacquer.



THIS Motor Revue custom's background is as entertaining as its low, neat appearance. Once a total wreck, the car's original frame was replaced by a discarded convertible's chassis; a bargain sale produced a used convertible body. Much trading of the battered '49 Ford's parts brought in other components, and a final deal included '51 Mercury running gear, engine, and automatic transmission. Owner Jay Johnston and friend Bill Bowman built a hardtop from a standard coupe top, and the car was lowered six inches in rear, four in front. Jay's shrewd bartering

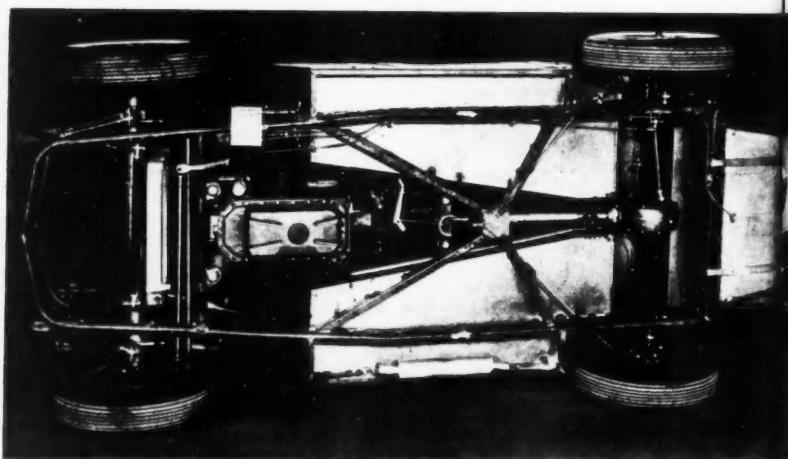
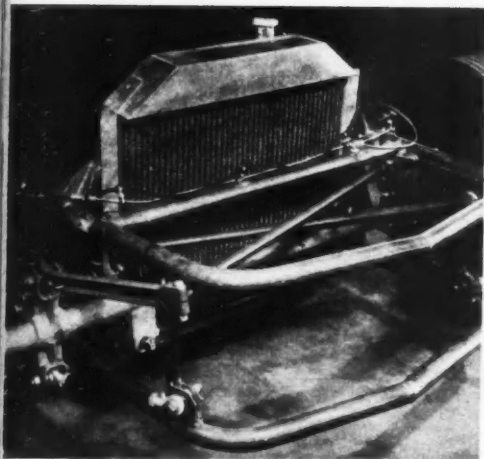
is matched only by his front-end know-how: He moved the A-arms upward and shortened the front springs; thus, by keeping the arms parallel (as in the stock Ford), the custom's front-end geometry was not destroyed in the dropping process. Hood corners are rounded and the grille opening is molded; the grille is made of '53 Dodge components. Tail light lenses are '51 Buick; fender skirts are louvered, and each louver is chromed. A *Car Craft* Magazine feature car, the Ford has a rolled-and-pleated interior done by the Gaylord Custom Shop of Lynwood, Calif.

Photos by Bob D'Olivo

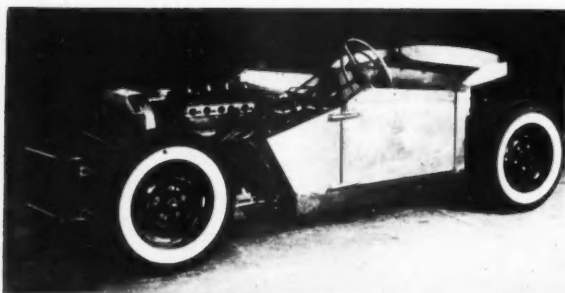
Competition-Bred Sports Car



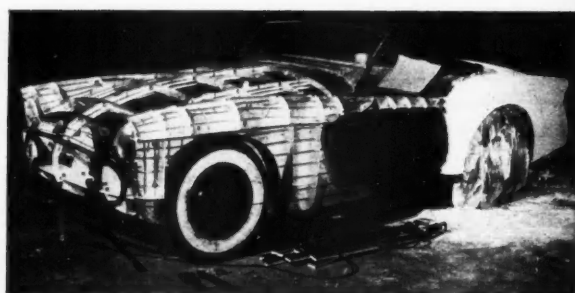
Following the formula that produced the Indianapolis championship cars, Frank Kurtis builds a new sports car



Kurtis has Ford running gear, steering box. At left, upper arm is torsion bar, lower arm is radius rod; note stiff axle



Prototype (with four-barreled Ford industrial engine in mockup chassis) shows steel reinforcement around cockpit



Painstaking craftsmanship in mockup is illustrated by stringers and metal used to approximate finished contours

CLOSE INSPECTION of the chassis shown here should reveal something familiar to race car enthusiasts; for motor enthusiasts in general, the description accompanying the car and chassis should reveal some facts that add up to a potent piece of machinery.

It's Frank Kurtis' latest development — a brand new sports car built on a chassis patterned closely after his championship-winning Indianapolis chassis and utilizing

all the characteristics that make a Kurtis car a threat on most any road course or "The Brickyard."

As one of our foremost designer-builders of competition cars, Kurtis recognizes the requirements of a car suitable for street use or racing rigors; thus is born a 90- or 99-inch wheelbase car that's easy to drive, comfortable to ride in, and tough enough to take any powerplant up to 450 horsepower. It's capable of 160 mph with a McCulloch-blown Cadillac or Chrysler under its hood.

Among the car's unique features are its steel-reinforced cockpit (the steel plate also supports the Fiberglas body), and its full transverse torsion bar suspension. Lighter than leaf or coil springing, this system has its suspension arms pivoting well ahead of the front wheels and well behind the rear wheels. This produces the smooth ride of a long-sprung car, and the handling qualities of a short-wheelbase sports car.

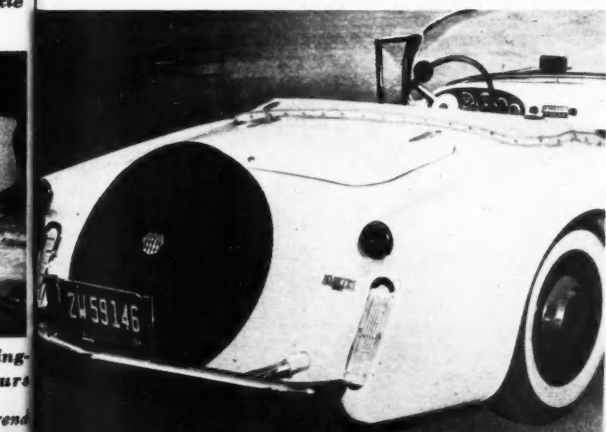
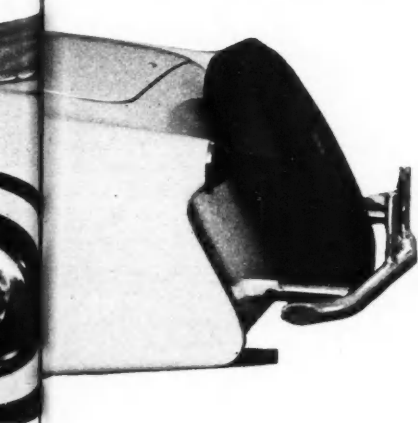
The new Kurtis is available in 25 different assembly groups to suit the customers'

needs and pocketbooks; a basic chassis kit sells for a little over \$300. Adding the trim body (and such options as a convertible top or Fiberglas hardtop, and roll-up windows), and speed equipment for the engine of your choice will bring the price tag up to about \$6000.

First introduced at the Fifth Annual Motor Revue and Motorama automotive show in Los Angeles, the Kurtis is X-member-braced for added strength; this bracing is carried out even in the doors. Air vents at the trailing edges of the front fenders and at the fore-and-aft extremities of the rear fenders ease the brake cooling problem.

The competition-bred sportster has a wrap-around windshield complete with wind wings, an aircraft-type instrument panel, sturdy chrome-moly wrap-around bumpers, and an external spare tire carrier. Form-fitting bucket seats will be available in a variety of colors and materials. The indented door panels are designed to be painted a contrasting color — providing a note of individuality for each customer.

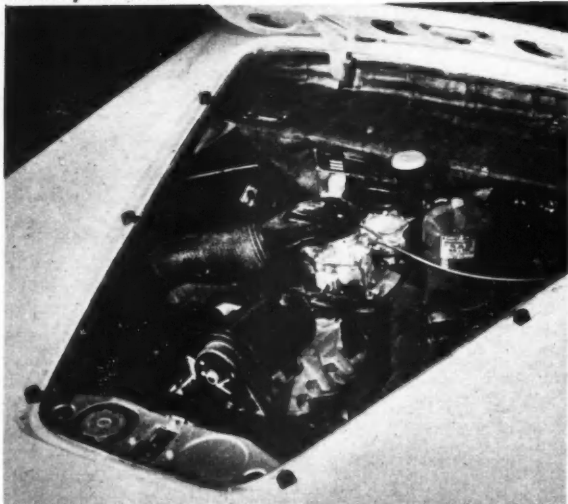
A Photo Story by Les Nehamkin



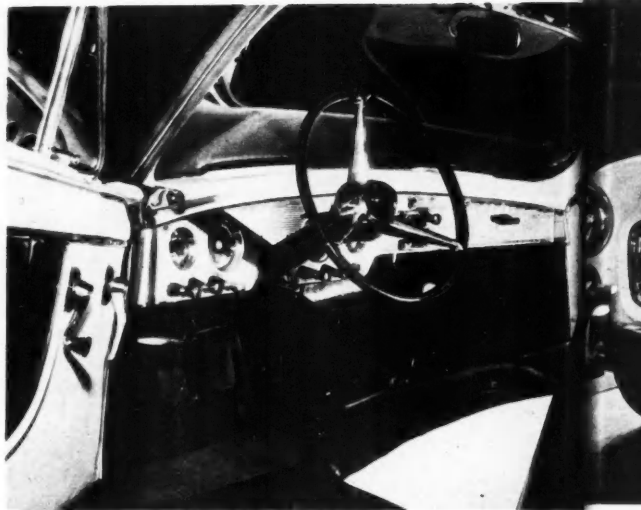
Above: There's nothing fancy about the interior, but it has business-like atmosphere and quality that demands respect
Above left: No skimping here; slotted grille is made of heavy steel stock, dignified bumper is tough chrome-moly
Left: Grille at rear of fender is matched by one forward of door and another (intake) at leading edge of rear fender

e u r o p e a n n

Photos by Joe Farkas



Comete's L-head V8 produces 105 horsepower, makes neat installation. Ford Monte Carlo has a 106-inch wheelbase

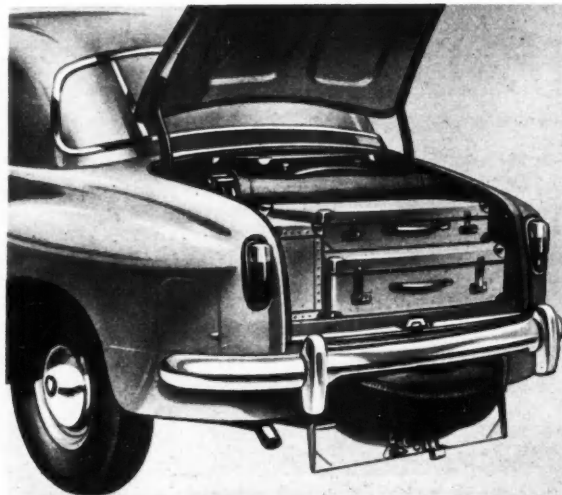
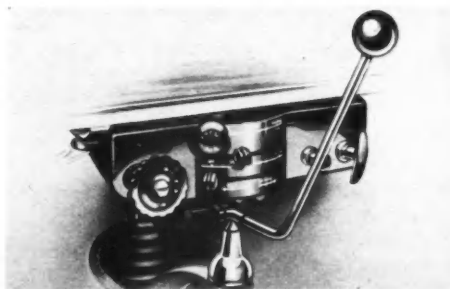


Custom-like interior of the French Ford seen at Dearborn features large, legible dials, short floor-mounted gearshift



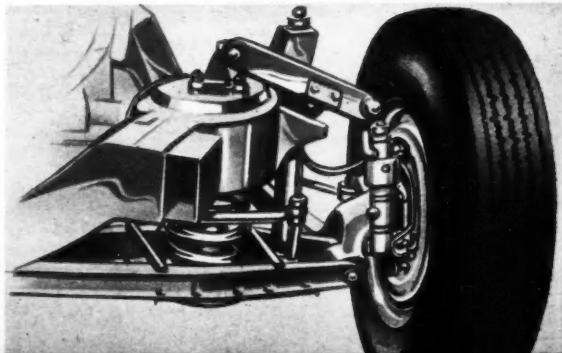
Rover for '55 is largely unchanged appearance-wise, but offers choice of three engines, improved braking power

Rover's floor-mounted remote shift linkage allows three-abreast seating in the front seat



Wrap-around rear window furthers British trend to improved vision. Rover's trunk has been restyled for greater capacity

The '55 Rover line retains use of solid-looking, independent coil-sprung front end. Grease fittings are held at minimum



Latest

SUR
in,
letter"
London
centers
There,
Carlo,"
the Ta
in a d
at the
Briti
for '55
creased
brakes)
The lat
its Fibe
ing bet
ment).
mental
major b
serve as
"SM" s
with a

Unlike
tion wa

news letter



The Ford "Monte Carlo" and a new Taunus station wagon; the '55 Rover, a plastic-hooded Singer

By Jim Lodge

Latest French Ford, the Monte Carlo Comete, is a handsome Dearborn showpiece

SURPRISINGLY, some of the cars appearing in this month's "European News-letter" come to us not directly from Paris, London, or other Continental motoring centers, but from Dearborn, Mich., U.S.A. There, 25 vehicles—the Comete "Monte Carlo," the German "FK-1000" bus, and the Taunus station wagon included—are in a display of five-nation Ford products at the company's Rotunda building.

British sources announce the Rover line for '55 (new rear window treatment, increased-displacement engines, larger brakes), and the new Singer 1500 cc sedan. The latter is of special interest because of its Fiberglas hood and "valances" (paneling between fender and engine compartment). The first steel-bodied, non-experimental sedan to make use of Fiberglas in major body sections, the Singer sedan will serve as a running mate to the familiar "SM" sports roadster—itself equipped with a removable Fiberglas hardtop.

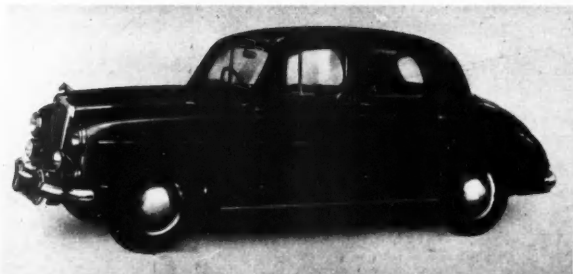


Joe Farkas

Eight-passenger bus is a product of Ford of Germany, has a four-cylinder engine

Unlike American counterparts, the German Ford Taunus station wagon utilizes a panel-truck-type loading door at rear

New Singer "Hunter" sedan has Fiberglas hood, may herald construction trend. Roadster models will have plastic top





Your Guide

**If the old car bug
has bitten you, here
are some tips on buying
and restoring that will
save you time and money**

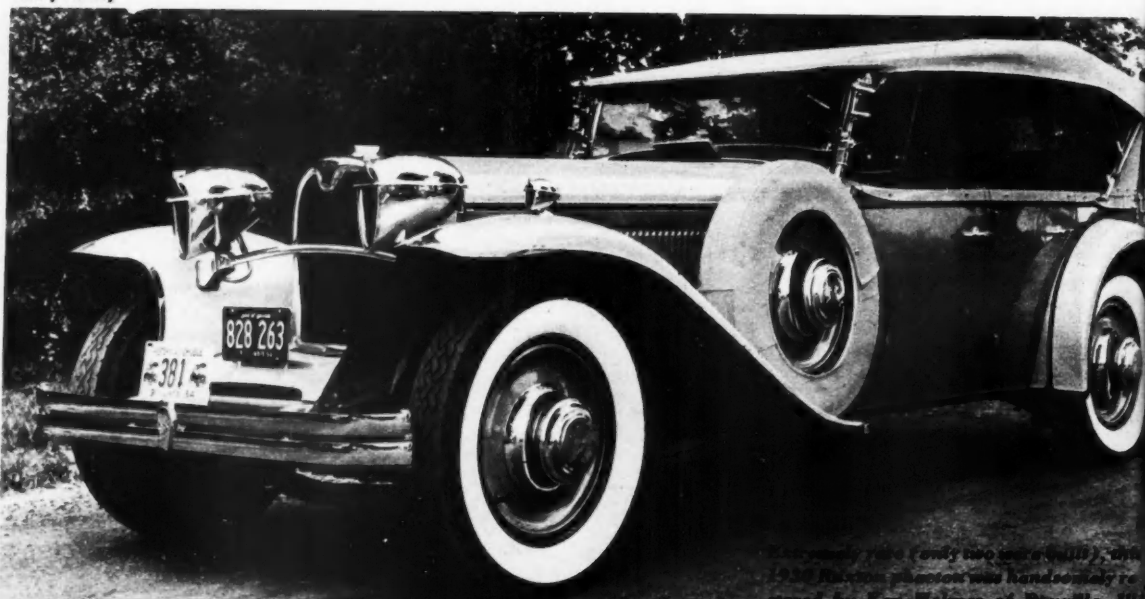
By Robert J. Gottlieb



Author Gottlieb carefully examines old Packard for possible restoration purposes. Deterioration in the form of excessive rust has set in, making body panel separation

*Missing
metal*

Harry Kinney



This super car (only two were built), the 1936 Packard Phaeton was handsomely restored by Ken Holman of Danville, Ill.

*This super
combine
January*

into the Old Car Market

IMPATIENTLY YOU TUG at your child's arm; any four-year-old should know enough to remain on the curb. The parade of brass-bound beauties, occupants resplendent in colorful costumes, slowly unfolds. And here come the classics, the special interest cars, and, what is this? . . . why, it's an old Stanley Steamer! You think the hobby must be fun and the owners mechanical wizards, or at least very wealthy. You like the fun, but your bankroll is limited and, from a mechanical standpoint, you shudder at having to install window shades. Is this the hobby for you? Brother, it sure is! Many people like yourself can participate but do not know how to start. You need but two things: the desire to participate in the hobby, and this article. Its purpose is to prove that you too have a niche in the old-car fashion parade, whether you lean toward classics, special interest cars, or the antique buggies. Where can you buy a classic or antique? Let's find out.

WHAT TO BUY

Participation in the automotive hobby is simpler than in many others. It's a lot more fun, too. The first step in getting into the market is to determine whether you want a classic, special interest, or an antique car. For either a classic or an antique, figure that you will spend a minimum of \$600 over a two-year period. The money can be spent piecemeal and you

won't have to lay it out all at once, unless you buy a restored car.

If you decide on an antique, make up your mind that the car you purchase will be a pre-1915 model. (Most horseless carriage clubs limit participation to pre-1915 autos.) Above all, it must be brass bound. (Many cars built around 1912 and 1914 used a minimum of brass, while some had no brass.) You feel out of place at an antique meet with an iron radiator job when other members have shiny brass trim on their show pieces.

If you decide on a classic, it is best to make up your mind to purchase an open-body job. Stay away from closed cars (from an investment standpoint) unless they are unusually rare.

If you decide on a special interest car (any unique vehicle that does not quite measure up to the standards set for classics, or a vintage vehicle that is not quite old enough to be an antique), you'll spend less than \$600 over a two-year period. In fact, you can establish a definite financial figure and generally stay within this limitation with a special interest job. Further, if your reason for buying a special interest car satisfies *you*, you can have as much fun with it as with a classic or antique.

There are other considerations which will enter into your purchase. In the antique field, members frequently hold tours and parades of 25 up to 1000 miles. If

Missing instruments and rusted-away metal mean you need a spare-parts car



This superbly restored Ruxton got that way as the result of combined luck and detective work, plus much loving care

January 1955



The odd Wood-Lites on this down-at-heel front-drive Ruxton were a desirable early-Thirties option on classic Packards

YOUR GUIDE INTO THE OLD CAR MARKET continued

you intend to participate in these events, you must have a car capable of keeping up with the others. Many one- and two-cylinder cars and many high wheelers will not exceed 20 mph. Consequently, the only way they can keep up with the other cars is on a trailer. Certain friction-drive cars, such as the Metz, presented serious problems of maintenance and dependability. Check into the automobile's background. If it caused trouble when it was new, it will undoubtedly cause trouble when restored. Electric cars are limited greatly in their travel because the batteries must be recharged. Incidentally, it is very expensive to duplicate the early-type batteries used in these automobiles. The steam car requires specialized knowledge of steam principles. Seek advice from other collectors and owners before making a purchase.

Try to buy a car that is pleasing and dependable. Handsome, dependable cars are always valued more than cars lacking either or both of these characteristics. In the classic and special interest field, look for a car that can be used, if necessary, as a second family car. This increases its value to you and any subsequent owner.

The cardinal rule to follow is to purchase a car in any category that will please you. Determine what you want or do not want in a particular model. As a corollary, do not purchase any car unless you want to drive it when it is restored. An exception is a car that you may find at a price so reasonable that you can use it as tracing stock or sell it at a profit, thus offsetting the final price of your ultimate purchase. Your search should be further tempered by a second rule: Do not purchase any car unless you can personally perform the bulk of the restoration work. And remember that a given car may be restorable by a body man, whereas an engine specialist might not be able to restore it. Conversely, an engine

man might be able to restore a car at which an upholsterer or body man would throw up his hands. Simple so far? You bet it is!

Armed with these thoughts, you can now progress into unexplored territory. But keep a tight grip on your wallet. Unfortunately, many experienced collectors are looking for a novice on whom to slough off a dog, at a price of course. Their teeth are sharp.

WHERE TO BUY

Sunday trips into sparsely populated areas, ranches, farms, backyards, and garages are the most prolific source of desirable cars. Do you think the supply is depleted? There are more ancient vehicles stored and for sale in city garages than there are in the hands of collectors. If you commence your search in the city, snoop around garages in older homes and neighborhoods. A home built in 1940 is not likely to have a '13 Ford in the garage. A home built in 1910 just might.

Look sharp, feel sharp, be sharp (with apologies to Gillette). Over a year ago, a publication featured a Stutz and a Pierce-Arrow in a wrecking yard, both for sale at reasonable prices. In the past year, the owner of these automobiles has not had a single inquiry regarding the purchase of the cars.

Join a car club (even before you start your search) composed of members interested in your type of car. There are many classic car clubs, antique car clubs, and special interest car clubs. Dues are nominal, the members are anxious to help you, and club publications list cars for sale by members.

Look in wrecking yards and used car lots. Old cars are space takers to uninformed wreckers and car dealers, and good deals can often be made. In the past three years, your classic car editor has purchased seven classics, every one restor-

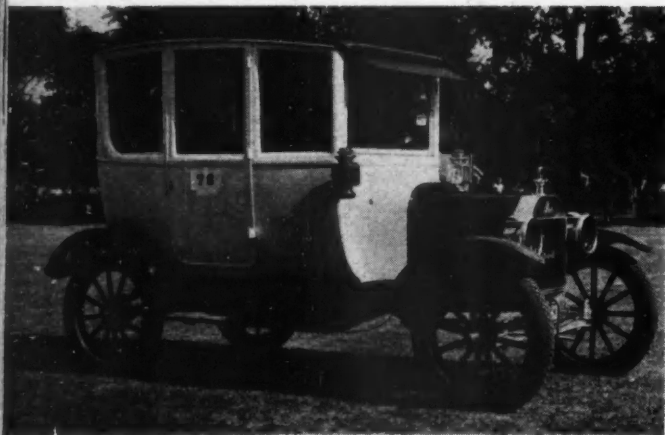
able, and all from used car dealers. They include a '32 Chrysler LeBaron phaeton, a '36 Lincoln LeBaron sport coupe, and a '36 Mercedes. The maximum price paid was \$200.

Surprisingly enough, the purchase of an antique or a classic car can be financed only by an indirect method. Most banks will refuse to lend money on the strength of a classic or antique as collateral security. There are many cases, however, where personal bank loans were made to individuals who needed the money to purchase an unusual vehicle. A personal loan and repayment in monthly installments may be your answer to completion of your first transaction.

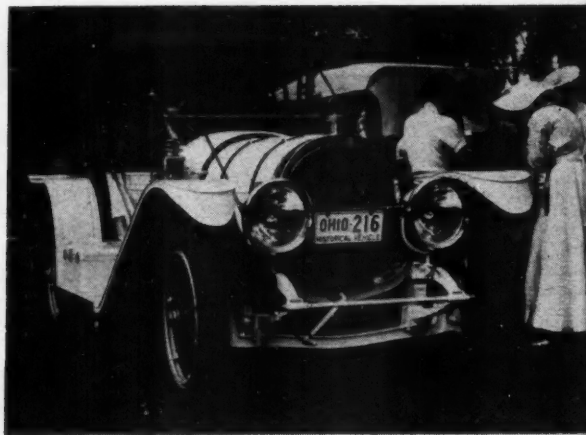
HOW TO BUY

Establish the value of older cars in your mind prior to making any purchase. This gets a little complex because certain models of a given year are worth \$4000, while other models of the same year are worth but \$100. It therefore behooves you to make a study of restoration costs as well as model costs. Discussions with other collectors and perusal of hobbyist publications is the best method of obtaining this vital information. In short, know the value of a car prior to parting with any money.

Search for your car prior to parades and outings, not after. It is remarkable how owners increase the prices of cars after a parade through town. Inquiry of station attendants and residents of small communities is often fruitful. Regardless of whom you ask concerning vintage vehicles, never request the location of "antique" or "classic" cars. This is a direct tip to the party that you are a collector, and the price is bound to spiral. Ask for an old transportation car. Some collectors, after spotting a desirable vehicle, seek to purchase a light or clock from the vehicle under the guise of being a light or clock collector. A nominal figure, such as \$5, is offered for the part. The owners usual-



A hilarious and satisfying place to start your car-restoring career is with a Model T; cheap parts are still plentiful



You'll participate in nostalgic tours, such as these avid enthusiasts have enjoyed in their two-cylinder Buick

ly counter with an offer of the entire car for a reasonable price.

Psychology plays an important part. Regardless of the price asked, do not hesitate to barter. The biggest collectors haggle and barter until the price reaches the amount they wish to pay. In short, they "sweat out" the owner until he makes a satisfactory compromise under penalty of having to keep the old bus in the garage for another 20 years.

Is there any general rule as to when to buy? Yes, there is; it is NOW. There is but one exception; a car that is still being driven by its owner and which is in need of tires and top can often be purchased at a reduced price just prior to a rainy season.

WHAT TO LOOK FOR

Find a car that is complete (because you will want to restore your car in as short a time as possible). By all means, avoid the purchase of a car that lacks major components. It is very expensive to have to duplicate bodies on either antique or classic cars; in fact, it is sometimes impossible. Cars that have had the rear tonneau removed for conversion into a pickup or tow truck are considered bad risks. There are only two exceptions:

(a) On antique cars, bucket seats and a gas tank may be installed and the vehicle converted into a raceabout; and

(b) A missing tonneau can be replaced if you have a complete spare parts car with a tonneau.

An antique converted into a raceabout is not an original automobile and will rarely equal in value a similar model which is original.

Original condition is a major consideration in the purchase of any car. A car that has wrong-sized wheels, a substitute engine, or substitute body or chassis parts is seriously affected from a monetary standpoint. Further, the substitute or makeshift parts will ultimately have to be replaced with original parts at considerable expense. Collectors have displayed a great deal of ingenuity in fabricating missing parts. For instance, an '03 Oldsmobile lacked the entire body; its owner obtained patterns and built the front half out of Plexiglas and the rear half out of plywood. In another case, an owner modified the rear tonneau of an early Auburn and fitted it to a Duesenberg. Close inspection is necessary to find the changes in both cases.

Are similar models plentiful or scarce? This is an important consideration. As an example, it is not difficult to find parts for a 1910 Model T or a 1932 Packard. Because the parts are plentiful, prices are usually reasonable. On the other hand, it is almost an impossibility to purchase parts for a Bugatti, Mercer, or Pope-Hartford. Parts for these rare models must be engineered and fabricated by hand. If you are not adept at designing or duplicating sundry pieces of machinery,

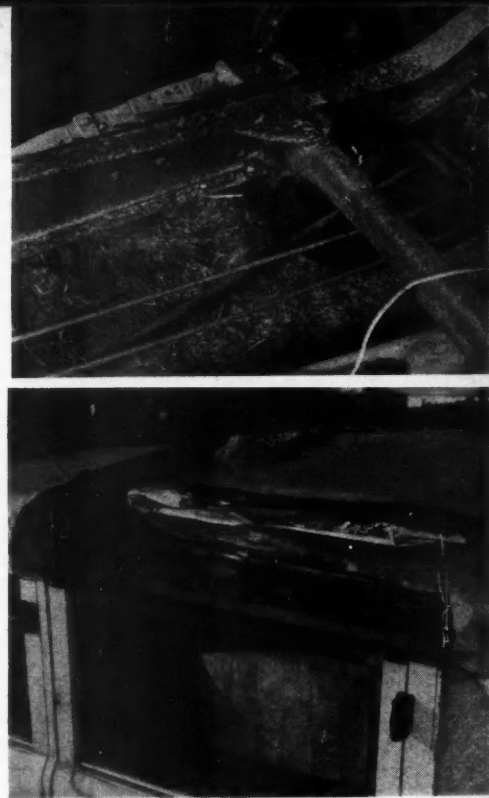
costs may become overly prohibitive.

Closely inspect the car you want. If all major components are there, check the body and the chassis carefully for rust. Rust has long been the enemy of automobile collectors and is responsible for the destruction of more antiques and classics than any other reason. In general, cars in the eastern part of the country are affected by rust to a much greater degree than cars in the western part. For this reason, certain classics and antiques are harder to locate in the East than in the West, notwithstanding that more of these cars were sold and operated in the East at the time the cars were new.

Rust attacks bodies as well as chassis and, surprisingly enough, engines and gears. A rusted chassis is not a major problem, though it requires lots of work. The body must be removed, the metal hand-scraped or sandblasted, primed and painted. There are many cases where rust has reduced bodies to mere shells. The metal is affected to such a degree that it will crumble upon slight pressure. Body panels in this condition are expensive to replace, as it is difficult to shape new material to form. Rusted fenders are not nearly so great a problem as rust on other parts of the body. The only exception is where the rust has attacked the nut-and-bolt sections which hold the fenders in place. These are expensive to restore. Many concerns specialize in making new fenders for antiques from sheet metal, and the cost is very reasonable. Antique car fenders were usually of simple design and the going price for four fenders (if you can supply the pattern) is approximately \$56. Because the metal for the fenders of classic cars is generally of heavier gauge than the body, rust seldom destroys them completely and they are generally found to be deteriorated in sections only. Sectioning a fender is neither costly nor difficult; it is laborious. Badly rusted parts which hold wooden frames for upholstery may have to be reshaped by hand, and badly rusted moldings or plated parts may have to be duplicated by hand. A safe rule to follow is this: if more than one-quarter of the body needs replacement because of rust, do not buy the car.

When an automobile has been stored for many years without proper attention, the engine has probably frozen up. This is usually caused by piston rings rusting to the cylinder walls, and you can generally count on the necessity of a complete engine overhaul. Some indication of engine condition can be obtained by turning the engine over with the hand crank. If it is frozen, do not force it.

Upholstery is one of the most expensive items in the restoration of an automobile. In the case of antiques, the average price for a tufted seat, whether front or rear, is \$150. If both front and rear seats and the doors are in need of new leather, the price can easily reach \$750. Reupholstering a classic is slightly less ex-



Above, scraping or sandblasting a pock-marked frame will be the prelude to priming and repainting it before assembly. Below, termites, a worse problem, have eaten away wood in rare Hispano

pensive because leather in classics was originally not diamond tufted and can be installed for a little less money. Cloth upholstery, while cheaper than leather, is still an expensive item.

Make sure that tires are available. Many collectors have purchased automobiles which were in need of a complete set of tires only to find to their dismay that tires were unavailable. It is safe to say that 80 per cent of the original tires used on classics, special interest, and antique cars can be purchased new on today's market. Depending on size, the prices range from \$30 each, on up. It is not unusual for a collector to pay \$250 for a set of four tires and tubes. If the tires are in poor shape, check the tire size carefully. If new tires cannot be purchased and used ones are unavailable, it will be necessary to switch wheels so that an available tire can be used. This too is an expensive operation.

If the top bows of a touring car or roadster are missing, the car should, nevertheless, be purchased. There are many sets of bows in the country, and a few concerns specialize in manufacturing new bows from old patterns. Those concerns engaged in this business generally have original patterns with which to work. Prices vary from \$35 on up. Bear in mind that patterns are available mostly for

YOUR GUIDE INTO THE OLD CAR MARKET continued

those standard automobiles which were manufactured in numbers and may not be available for one-of-a-kind automobiles.

Lights and lamps should present no problem. There have always been hundreds of lamp collectors in the country and they are well fortified with brass lamps taken from early antiques and with large plated lamps from special interest and classic cars. Solid brass headlamps for antiques range in price from \$50 per pair up; the average good pair will cost \$75. Rare special lamps, such as self-generating headlamps, are valued at \$150 each and up. Brass tail lamps are valued at \$25 apiece, and brass bulb horns start at \$25 in good condition; the average price is \$45. If the lamps are not brass, such as the round oil lamps used on the early Model Ts, they can be purchased (brand new) for 50¢ each. With rare exception, lights for classics are valued at much less money. Fortunately, light manufacturers often sold the same light to more than one manufacturer, and it is not difficult to locate suitable lights for a classic. In those rare cases where missing lamps cannot be acquired, it is permissible, from a classic standpoint, to install headlamps used during the classic era as an accessory. A good example is the Wood-Lite, a teardrop de-

sign sold throughout the country as an accessory, abundant in number, used originally by many manufacturers, and priced today at \$10 per pair.

Wheels rarely create a major problem in the restoration of a car. Missing wheels from antiques can be duplicated by machining hubs so that replacement wheels will fit. Owners of high wheelers, such as the Sears and International, have the greatest problems. Wheels for these models are scarce and the wheels must be sent to factories for proper installation of solid tires. The great majority of wheels on antiques are made of wood. It is not difficult for a good carpenter to make a new spoke or spokes, and well-equipped wheel shops can tighten and true wheels. Loose spokes can be tightened in a number of ways; the most common is to scrape the paint from the wood and immerse the wheel in linseed oil so that the wood will swell. The use of shims is another method. During the classic era, wheels were more or less standard, though hubs and spoke arrangement varied widely. Very few classic car collectors have serious wheel problems. Wheel condition can be ascertained by jacking up the car, tugging at the wheel to determine if it is loose, and spinning it to determine if it

is true. If a car is equipped with wooden wheels, it can be pushed or towed slowly. A squeaky noise indicates loose spokes.

Metal straightening, painting, plating, engine overhauling, top installation, glass installation, etc. are average problems which are easily solved at the corner garage. More difficulty arises in learning where to purchase parts such as brass lamps and obsolete parts which the mechanic on the corner has not seen for 30 years. Membership in any one of the antique or classic car clubs will solve this problem. It is surprising how many other members will know exactly where to purchase the very part you are looking for. In addition, club publications generally have service directories, which list concerns engaged in selling, repairing, or merely helping the owner of an antique or classic. Membership in a club for an extended period will open the door to the great majority of your problems. Suggested groups are the Classic Car Club, 1015 Tremaine Ave., Los Angeles; Horseless Carriage Club, 215 N. Larchmont Blvd., Los Angeles; Antique Automobile Club of America, 161 Water St., Stonington, Conn.; Rolls-Royce Owners' Club, Inc., D. D. Williams, Secretary, 622 Woodburn Rd., Raleigh, N. C.; Auburn-Cord-Duesenberg Club, c/o Robert Fabris, 66 E. Irwin Ave., Hagerstown, Md.; Veteran

THE NEW V8 ENGINES FOR 1955

Make	Advertised bhp @ rpm	Torque (lb.-ft. @ rpm)	Displacement (cu. in.)	Bore & Stroke	Comp. ratio	Carb. (2 or 4 barrel)	Dual Exhausts	Model Availability	Remarks
Buick	188 @ 4800 236 @ 4600	256 @ 2400 330 @ 3000	3.63x3.20 4.00x3.20	264 322	8.4 9.0	2 4	No No	Special Century, Super & Roadmaster	Synchromesh models have 7.5:1 CR Century & Super with synchromesh have 8.4:1 CR
Cadillac Power Package	250 @ 4600 270 @ 4600	345 @ 2800 350 @ 2800	3.81x3.63 3.81x3.63	331 331	9.0 9.0	4 twin-4	Yes Yes	Series 62, 60 Special, & 75 Eldorado	Optional on all other models
Chevrolet Turbo Fire Power Package	162 @ 4400 180 @ 4600	257 @ 2200 260 @ 2800	3.75x3.00 3.75x3.00	265 265	8.0 8.0	2 4	No Yes	All All	Powerglide equipped cars have hydraulic tappets, others mechanical
Chrysler Spitfire FirePower	188 @ 4400 250 @ 4600	275 @ 2400 340 @ 2800	3.63x3.63 3.81x3.63	301 331	8.0 8.5	2 4	No Yes	Windsor New Yorker Deluxe & Imperial	Six discontinued New Yorker discontinued
DeSoto FireDome Firelite	185 @ 4400 200 @ 4400	245 @ 2800 274 @ 2400	3.72x3.34 3.72x3.34	291 291	7.5 7.5	2 4	No No	All All except station wagon	Six discontinued High lift cam
Dodge Red Ram Super Red Ram Power Package	175 @ 4400 183 @ 4400 193 @ 4400	240 @ 2400 245 @ 2400 245 @ 2800	3.63x3.25 3.63x3.25 3.63x3.25	270 270 270	7.6 7.6 7.6	2 2 4	No No Yes	Coronet & Royal Custom Royal All	Six optional in Coronet and Royal Available with all transmissions Available with all transmissions
Ford Trigger Torque	162 @ 4400	258 @ 2200	3.62x3.60	272	7.6	2	Fairlane station wagons	All	Six optional all models
Power Package	182 @ 4400	268 @ 2600	3.62x3.60	272	8.5	4	Yes	Fairlane	Fordomatic only
Thunderbird	193 @ 4400	280 @ 2600	3.75x3.30	292	8.1	4	Yes	Thunderbird	Standard & overdrive transmission
Thunderbird	198 @ 4400	286 @ 2500	3.75x3.30	292	8.5	4	Yes	Thunderbird	Fordomatic only
Lincoln	225 @ 4400	332 @ 2500	3.94x3.50	341	8.0	4	Yes	All	Turbodrive transmission only
Mercury	188 @ 4400 198 @ 4400	274 @ 2500 286 @ 2500	3.75x3.30 3.75x3.30	292 292	7.6 8.5	4 4	Monterey Yes	Custom & Monterey Montclair	All transmissions available All transmissions available
Oldsmobile Rocket	185 @ 4000 202 @ 4000	320 @ 2000 332 @ 2400	3.88x3.44 3.88x3.44	324 324	8.5 8.5	2 4	No No	"88" Series Super "88" & "98"	Synchromesh or Hydra-Matic opt. Optional in "88" Series
Plymouth Hy-Fire	157 @ 4400	217 @ 2400	3.44x3.25	241	7.6	2	No	All except business coupe	Six optional except in convertible Six only in Plaza business coupe
Super Hy-Fire	167 @ 4400	231 @ 2400	3.56x3.25	260	7.6	2	No	All except business coupe	
Power Package	177 @ 4400	231 @ 2800	3.56x3.25	260	7.6	4	Yes	All except business coupe	
Pontiac Strato Streak	173 @ 4400 180 @ 4600	256 @ 2400 264 @ 2400	3.75x3.25 3.75x3.25	287 287	7.4 8.0	2 2	No No	All All	3-speed transmission only Hydra-matic only
Studebaker Pacesetter	140 @ 4500	202 @ 2800	3.56x2.81	224	7.5	2	No	Commander	Mechanical tappets
Studebaker Wildcat	175 @ 4500	250 @ 3000	3.56x3.25	259	7.5	4	No	President	Mechanical tappets

When this chart was published last month, MT's typewriter must have been out to a long lunch. Here is a more complete (and more accurate) version; our apologies to the manufacturers concerned.—The Editors

Motor Car Club, 15 Newton St., Brookline 46, Mass.; and the H. H. Franklin Club, 1405 E. Kleindale Rd., Tucson, Ariz.

There are wrecking yards specializing in the repair and overhaul of particular automobiles. Finally, there are concerns which, for a price, will completely restore a classic or antique. The owner has merely to purchase the car, deliver it for restoration, and pay (and how) when it is completed.

DETERMINING FINANCIAL VALUE

The initial cost plus the restoration cost must not exceed the probable restored sale cost; this is the formula for any antique or classic car purchase. The probable sale cost is best determined by knowledge of the selling price of similar cars in restored condition. Close association with the hobby over an extended period is the best method of acquiring this information. You know the asking price of the vehicle, so average restoration costs are set forth here as a guide. These can vary as much as 50 per cent.

New top—touring cars	\$100
Leather upholstery, per seat	\$125
(diamond-tufted work slightly higher)	
Paint job	\$100 up
Major engine overhaul, antique	\$300
Major engine overhaul, classic	\$500
Plating for the average classic (all parts)	\$350
Four tires and tubes, antique	\$150 up
Four tires and tubes, classic	\$200 up
Metal work and machine work—	

Estimates necessary

If the probable restoration cost plus the initial cost does not exceed the restored sale price, you have a good buy financially. Regarding restoration costs, do not overlook the possibility of purchasing a spare car for parts. In many cases this can reduce restoration costs by as much as 80 per cent. A spare parts car, when available, may even make feasible the purchase of another car which you would ordinarily not buy because parts of the body are missing or the engine is incomplete.

TRICKS OF THE TRADE

Numerous outlets are available to a collector for solving problems. Parts interchange books printed during the era when the car was manufactured list parts from other automobiles which can be used as replacement parts in your car. Even where parts are not directly interchangeable, similar parts can often be modified or machined to fit. This is particularly true of fenders, axles, bearings, pistons, rings, valves, seat cushions, top bows, and accessories such as carburetors, lamps, magnetos, etc. It is permissible to install a roadster body on a frame which was originally equipped with a touring body, or vice versa. Complete units can often be interchanged, such as differentials, clutches, transmissions, and, as previously mentioned, wheels. A good example is the

installation of a 1937 Dodge 1½-ton truck differential in a 1932 LeBaron Chrysler. Odd-ball cars, such as those equipped with sliding sleeve valves, very unusual engines, or strange running-gear parts, are costly to restore. It is best for a novice collector to avoid purchasing cars in this category.

Books, magazines, and diagrams containing technical information are generally available in libraries and secondhand stores. Wiring diagrams especially are easy to find. They are a great aid in restoration of electrical systems.

Once a car is fully restored it can generally be rented for parades, advertising purposes, and in certain localities for motion picture and television films. The income, though small, is of some help in defraying expenses. Some experienced collectors make a part-time business of renting cars; over a period of years the total income exceeds the initial plus restoration cost. Your hobby can work for you as it has worked for others—even if you never rent your car—for it's a hobby which will give you fun, relaxation, and personal satisfaction.

—Robert J. Gottlieb

GALE HALL ENGINEERING

proudly presents the

MILE-O-METER "Custom"

SO REVOLUTIONARY—

SO OUTSTANDING—

that we want you to try it at our risk on

FREE TRIAL!

Yes, the new Mile-O-Meter "Custom" is such a sensational improvement in America's most popular automotive gauge that we want to send it to you—at our risk—for a seven-day free trial! Send no money—we trust you'll see for yourself how Gale Hall's wonderful new "Custom" looks and operates!

The "Custom" is scientifically calibrated to show actual "miles per gallon" for any car while driving! Its other professional scales keep a constant check on engine condition, and warn when minor adjustments are necessary to prevent costly repair bills. Its precision 0-25 vacuum scale makes "do-it-yourself" tune-up a "breeze" (and Mile-O-Meter's sensational "Dashboard Manual" shows you how!) The Mile-O-Meter "Custom" will pay for itself over and over again... it's the most important investment that you can make to get all the performance and economy your car can offer!



Easy to read! Simple to install! Mount right on dash (no holes to drill!) All necessary accessories and instructions included. Free "Dashboard Manual" valuable tips on car tune-up, economy, etc!

New modern appearance! Smart four-color dial with gleaming chrome trim!

3 1/2" diameter illuminated only \$14.95 Ppd.



2 1/2" diameter only \$9.95 Ppd.

For years, Mile-O-Meter has been the country's most talked-about automotive instrument... over 1,000,000 in use! Now the new "Custom" is getting even greater raves from automotive editors and authorities! Order yours today on FREE TRIAL!

SEND NO MONEY • PAY POSTMAN NOTHING

GALE HALL ENGINEERING INC.
Dept. M-15 North Hampton, N. H.

YES! Send me the new () \$14.95 or () \$9.95 Mile-O-Meter "Custom". I understand that I can test the "Custom" for 7 full days. At the end of that time, I'll simply send payment or return the instrument.

Name _____

Address _____

City _____ State _____

SEND NO MONEY • PAY POSTMAN NOTHING

PAY POSTMAN NOTHING

SEND NO MONEY

Spotlight on Detroit

MIGHTY MITE



Mighty Mite's 64½-inch wheelbase eases ditch-hopping task



It hauls 500 pounds, tows twice that through mud like this

WHEN HUDSON PRACTICALLY SHUT DOWN its sprawling Detroit plants at the close of the 1954 model run, employees had good reason to wonder about their future. They knew that '55 Hudsons would be made in American Motors' Kenosha, Wis., factories, and that current defense contracts (aircraft fuselage and engine sub-assemblies) were hardly large enough to keep everyone on the payroll. In other words, they were out of a job. A silver lining was provided by announcement of the creation of the Hudson Special Products Division, an organization designed to be flexible enough to manufacture (in the Detroit plants) anything from a heater switch to a complete vehicle.

That phase of Special Products' activities devoted to defense production, however, would be specialized with an eye towards achieving pre-eminence in one field.

EMPTY WORDS ARE NOT A HABIT with George Romney, American Motors' dynamic new boss man, so Detroit automotive writers kept space open for the news sure to come. Romney, who has been traveling around the country lately on a pogo stick, came through in record time. He returned from Wheatland, Pa., the other day with manufacturing rights to the "Mighty Mite" in his pocket. This jeep-like vehicle was developed a few years ago

for the Marine Corps by versatile Ben Gregory of Mid-America Research Corp. It received a flurry of publicity at the time because it out-jeeped the jeep and weighed 1300 pounds less, making it transportable by helicopter. It climbed 87 per cent grades (steepest highway grade in the country is only 32 per cent), plowed through fender-deep mud, sped along at 57 mph on the highway, and you could even drive on water with it by simply attaching a specially designed Mae West.

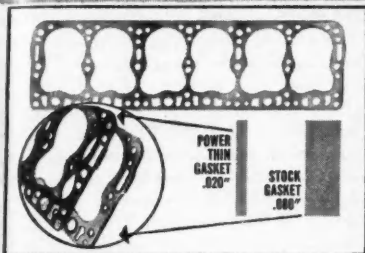
IT HAD ONE DRAWBACK from a military standpoint, and this was big enough to keep the Marine Corps from buying. The prototype Mites were powered by the four-cylinder (horizontally opposed), air-cooled Porsche engine. It did a fine job, but military brass does not look upon parts procurement problems with the same equanimity as a sports car fan. The Mite was out until it had an American-made engine, and big power in a small package like the Porsche just isn't (or rather, wasn't) produced on this side of the ocean.

AMERICAN MOTORS' SOLUTION to this problem is the key to our interest in the Mighty Mite. Ready for production right now is a Nash-designed, air-cooled, aluminum die-cast engine which will obviously meet the space and power specs of the standard Porsche. If the Marine Corps buys Mites enmasse, American Motors will be tooled up to re-power their Metropolitan courtesy of Uncle Sam. It certainly sounds like a good bargain all around, and is a pointed example of why we listen to George Romney whenever he speaks.

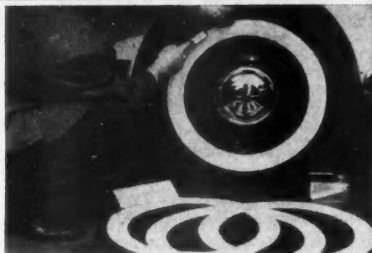


Flotation gear isn't needed here; mud can't swallow the 1496-pound Mighty Mite

New Products MAIL MART



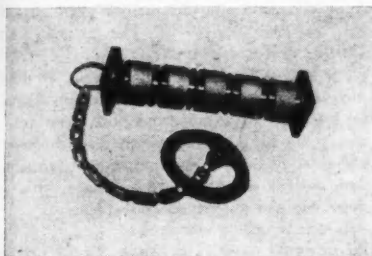
A '55 ENGINE IN YOUR CAR? Power Thin Gasket (type used on many '55's) gives surging high-compression power—terrific gas economy! Equals milling head about .060", greatly increases compression. Not a "bargain priced" hand-cut compromise—precision patterned for each make car. Available all cars (V-8 pairs same price). Aluminum, \$4.95 ppd. Copper, \$6.75 ppd. Item #1.



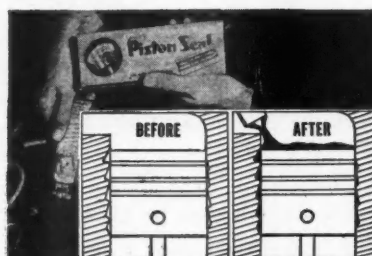
SAVE OVER \$40 on white sidewalls! Thick white latex "circles" transform your black tires into gleaming white sidewalls! New, super-strength bonding permanently welds Custom Sidewalls to tires. Full instructions for easy application. Specify wheel size! 100% pure latex. Each, \$3.25; set of 4, \$9.95; set of 5, \$11.95. Item #2. White rubber sidewalls: Set of 4, \$6.95. Item #2A.



CUT DAILY DRIVING COSTS! Improved Lifetime porous bronze cylindrical oil filter lasts forever—ends costly cartridge replacements. Stronger, greater filtering area. Removes all harmful particles. Can't soak out additives. Oil lasts longer. 10 year Guarantee! For most cars, \$6.95, ppd. Complete with housing, \$12.95, ppd. Full flow element, \$11.95, ppd. Item #3.



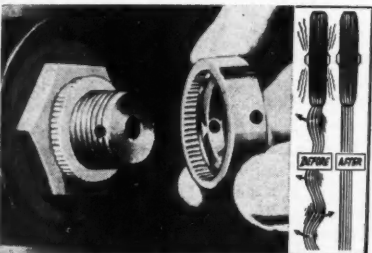
CAR RUNNING HOT? Radiator full of rust? McRay Protecto Rod rids radiators and motor blocks of scale, corrosion, rust. Its copper and zinc discs set up a galvanic battery action, remove old deposits that solvents and flushing can't touch. Restores full effectiveness of a clean cooling system. 10-second installation in any radiator. Will not rattle. \$1.95 ppd. Item #4.



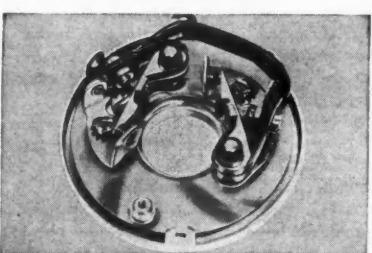
NEW LIFE FOR TIRED ENGINES! Motor use oil like a thirsty diesel—sound like an "anvil chorus"? Holt's Piston Seal will add thousands of miles to its life. Just unscrew spark plugs and squeeze into holes. Self-expanding seal restores compression, reduces oil consumption, ends piston slap. Insured by Lloyds of London. Treatment lasts up to 10,000 miles. \$4.95 ppd. Item #5.



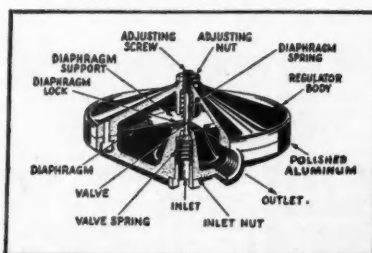
WHY HUDDLE ON A COLD CAR SEAT this winter? Heat-A-Seat plugs into cigarette lighter and warms instantly. In summer it's an air-cooled cushion. Triple-insulated with rubberized silicon Fiberglas; draws less than 4 amps. U.L. safety approved. Fully guaranteed. Covered in handsome plaid plastic. Red, blue, or green. State choice. Only \$5.95 ppd. Item #6.



GET 5,000 EXTRA MILES per tire—safer, more accurate steering with "Micro-Lock" Spindle Nuts. Make front wheel bearing adjustment 10 times more accurate! 60-point micrometric head holds bearing in perfect alignment. Saves tires, bearings, brakes, eliminates brake squeaks. Easier to install than conventional nut! For all cars, \$2.98 per set, ppd. Item #7.



CONVERT TO DUAL IGNITION! Use Dual-Point Breaker Plates for a fatter, hotter spark! Eliminate high-speed miss, reduce point-pitting, plug fouling. Enjoy easier starting, smoother performance, better gas mileage. Easily installed—use with present coil. Chev, Ford, Merc, Linc, \$6.50, ppd. Ball bearing type for all other, \$9.95, ppd. Item #8.



STOP DRIVING A GAS HOG! Use a Gane-Master Fuel Pressure Regulator. Its sensitive diaphragm smooths out fuel pump pulsations... permits ideal fuel-air mixture. Prevents vapor lock, eliminates gas waste, stalling, flooding, and frequent carburetor adjustment. Helps keep your engine "clean." Quickly pays for itself on any car or truck. Only \$7.95, ppd. Item #9.

ORDER BY MAIL TODAY!

Buy with confidence from the World's Largest Distributor of Hi-Performance auto parts! Every item guaranteed. Send check and we pay postage on those marked, ppd; others, FOB Los Angeles. Send 20% deposit on C.O.D.'s. (Outside U.S.A. full remittance required.) California buyers add 3% sales tax.

DEALERS! Excellent opportunities for you! Write today on letterhead for full information. © 1954

NEWHOUSE AUTOMOTIVE INDUSTRIES
3805 E. Beverly Blvd., Los Angeles 22, California



3805 E. BEVERLY BLVD., DEPT. 253

GIANT 1955 CATALOG

Thousands of Items. Sent FREE with order. (Otherwise send 25¢ for postage and handling.)

LOS ANGELES 22, CALIF.

Gentlemen: Please rush me the items circled at rights 1 2 3 4 5 6 7 8 9

My car is: _____ Year _____ Model _____ No. Cyl. _____

Name _____

Address _____

City _____ Zone _____ State _____

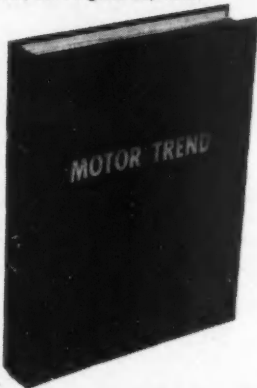
\$ _____ Full Price Enclosed.

\$ _____ 20% Deposit. Send C.O.D.

a long and healthy life

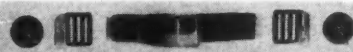
is assured your valuable copies of **MOTOR TREND** with this durable binder! In a deep, rich brown, this leatherette binder is gold-stamped on the front and serves well as a convenient keeper of an entire year's collection of **MOTOR TREND**.

Send \$2.25 today for yours and keep all your **MOTOR TRENDS** in one place! Send to MT Binders, 5959 Hollywood Blvd., Los Angeles 28, Calif.



MARECO AUTO SAFETYBELT

Famous military and aircraft belt maker now offers air line type safety belts for all cars. Money-back guarantee. No finer belt regardless of price. All belts meet rigid CAA requirements. List colors: grey, green, blue, maroon.

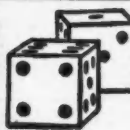


Deluxe Belt nylon webbing \$9.95 ppd. front seat single. \$10.95 ppd. complete rear seat.



Heavy cotton webbing (used by TWA) \$8.95 ppd front seat single. \$9.95 ppd. complete rear seat. **MAXIMOFF RESEARCH CO.**—Sorry no C.O.D.'s. 5916 Sepulveda Blvd. Van Nuys, Calif.

FREE! FAMOUS BLUE BOOK CATALOG



DICE • CARDS
Perfect Dice, Magic Dice, Magic Cards—**READ THE BACKS**—Inks, Daubs, Poker Chips, Gaming Layouts, Dice Boxes, Counter Games, Punchboards, WHITE boards.

FOR CATALOG TODAY.

K. C. CARD CO., 848 S. Wabash Av., Chicago, Ill.



IDLER ARM STABILIZER

LIST PRICE \$2.75. Shipped Prepaid. Everywhere. BROWSE INDICATES MOTION, WHICH CAUSES 90% OF THE STEERING LOSSES IN FORDS, MERCURYS, AND LINCOLNS.

AM-49 fits Mercury and Lincoln 1949-1950-1951
1952-53 fits Ford and Mercury 1952-1953 (Straight arm)
MM-32C fits Ford and Mercury 1952-1953 (Curved arm)
S-32C fits Lincoln 1952-53-54 (Curved arm)
1954-55 fits Ford-Mercury 1954 (Curved arm)

B and B Specialty Company
1710 HAWTHORNE AVE. HOUSTON 6, TEXAS

STOPS ACID ACTION

Stop engine wear! USE MAGNICO!

Magnesium alloy acid neutralizer drain plug kills and neutralizes sulphuric and other harmful acids. Alnico inc. magnet catches microscopic iron filings from the oil. Price \$2.95 ppd. Money back guarantee. Give make, year and model of car when ordering and your name and address.

THE EELOYL CO., 321M E. Camino Real, Menlo Park, Calif.

MT RESEARCH Technical Service

By Fred Bodley

Please send a stamped, self-addressed envelope if you want to receive a personal answer. There is no charge for this service. However, due to the bulk of letters received, it is impossible to give a quick reply. Only selected questions will be printed.

QUESTION—A lot has been said about power and economy when using dual exhaust systems. I would like these advantages but am also desirous of a quiet exhaust. Is such a combination available? *L. E. Solom, Wildwood, N.J.*

ANSWER—You can have the advantages of a dual exhaust system and a quiet car by installing stock mufflers. There is very little loss of efficiency.

QUESTION—Of the three basic engine designs, namely, the four, six, and eight cylinder, which has the least degree of overlap on the power stroke? *B. L. Beall, Portland, Ore.*

ANSWER—All automobile engines manufactured in the U.S., and with few exceptions those manufactured in Europe, are of the four-stroke-cycle type, commonly called four-cycle. Four strokes of the piston, i.e., two up and two down, which require two revolutions of the crankshaft, complete the cycle of events, namely, intake, compression, power, and exhaust. As two revolutions of the crankshaft is 720 degrees, each stroke of the piston requires 180 degrees. Regardless of the number of cylinders an engine of this type contains, whether it is one or 24, all the cylinders will fire during each two revolutions of the crankshaft. Hence, the larger the number of cylinders, the greater the number of degrees of power overlap.

QUESTION—Can you supply me with the name of a power steering unit that could be adapted to a '51 Lincoln? *Chester Disque, Honolulu, T.H.*

ANSWER—Monroe Auto Equipment Co., Monroe, Mich., is making power steering kits for '49 and later popular cars. Whether a kit is available for a '51 Lincoln I am unable to say, but one of their kits can probably be adapted without too much trouble.

QUESTION—I want to customize my '48 Buick Roadmaster. I need to use plastic and I would like to know if it can be used with metal. *John Fynch, New Hartford, Conn.*

ANSWER—By plastic, I assume you refer to Fiberglas or the resins used in conjunction with this material. The answer is yes. It will bond to metal satisfactorily if the metal surface is perfectly clean and has been roughened with a coarse disc sander.

QUESTION—I would like to know if a '53 Ford dual intake manifold will fit a '48 Ford. *Ronald Respondek, Detroit, Mich.*

ANSWER—The manifold will fit all right but the fuel pump stands are different heights and the fuel pump pushrods have different diameters. By substituting, you should be able to accomplish the changeover.

QUESTION—Are the rear fenders and bumpers of a '49 Cadillac Series 62 four-door sedan interchangeable with those of a '49 Oldsmobile 98 four-door sedan? *James Hoover, Noblesville, Ind.*

ANSWER—The rear-compartment lids are interchangeable but the rear-quarter panels are not, so some fitting would be necessary. Once this is accomplished, the bumpers should pose no problem.

QUESTION—I have a 1954 Chevrolet with Powerglide. I am thinking of installing a three-carburetor manifold, leaving the remainder of the car as is. What can I expect from this setup in the way of performance and gas mileage? *J. A. Vanderford, Fort Worth, Tex.*

ANSWER—To obtain full benefit from a three-carburetor manifold, your engine should be modified to a hot street job. That is, it should have high-compression pistons, larger valves and ports, a fast cam, hotter ignition, and a dual exhaust system. Unless this is done you can not expect too much.

QUESTION—I have installed a Ford V8 '60 in my Morris Oxford. What can I possibly do to use the 12-volt system with the Ford six-volt equipment? *Harvey Squier, Canandaigua, N.Y.*

ANSWER—Adapt a 12-volt coil and condenser to the Ford distributor. Adapt the Morris 12-volt generator to the Ford engine. The Ford six-volt starter motor will take 12 volts if the starter is not used for prolonged periods. This, I believe, is the simplest solution.

QUESTION—I need some sound advice. I have a 1954 Ford V8 with overdrive and less than 500 miles on the odometer.

I wish to improve performance without sacrificing reliability and at a minimum of expense. I want plenty of snap, to be able to cruise at 80 and have plenty of reserve left. In short, I would like to have Olds 88 performance out of my Ford. *C. W. Wade, North Chicago, Ill.*

ANSWER—You, like all of us, would like to have your cake and eat it too. This is impossible gastronomically, and under the conditions you have outlined for your Ford, impossible mechanically.

First, the Ford engine lacks approximately 88 cubic inches of the displacement of the '54 Olds engine. As has been said many times, there is no substitute for the torque of cubic inches.

Even if you increase the bhp of the Ford engine to 180, you still won't have the low speed performance of the Olds engine. And you will certainly lose the reliability built into Ford products. I suggest that you compromise with some of your conditions or go Olds 88.

A \$2 KOZAK Saves You up to \$100

—or It's Yours to Keep FREE!

Does YOUR Car Get Dirty the Day After It's Washed?

IF SO, YOU NEED KOZAK!



WITH Kozak you can save 80% of your wetwashes, and have a clean car every day the sun shines. Takes only 7 minutes of your (or one of the boy's) time—at a cost of less than 4¢ a DRYWASH. A \$2 investment in a Regular Kozak DRYWASH cloth will return itself in full every time it rains or snows—and keep on doing so for months—saving you \$50 to \$100 in formerly unnecessary car washing expense.

As One Kozak Fan Wrote:

"There is no excuse whatever for a man to drive a dirty car if he knows there is such a thing as a Kozak DRYWASH process." And, of course, that fan's beautiful Cadillac Fleetwood is his pride and joy—and is never dirty—except during the very rain itself and the short time it takes for it to dry off. Then 7 minutes DRYWASH and, presto! \$2 saved—clean car again—not a penny out of pocket—not a squeak from high pressure water washing—a real nice job you can be proud of. More five cars are DRYWASHED daily than less expensive cars. And 10,000,000 Kozaks have been bought by critical people in the past 28 years—people who have saved thousands of dollars—and, more important, have got for themselves bigger trade-in allowances for turning in a nice, clean car.

Our Way of Doing Business:

Mail orders for Kozaks are filled without fail the same day received and have always been. A simple request for refund in full is immediately answered by air mail with our expression of appreciation. So far as we know we have no dissatisfied customers anywhere, and have hundreds of thousands of enthusiastic users in every city, town, village, and most hamlets. You are never asked to return your purchase. If you don't like it for any reason, you keep it or give it away to your firehouse or police patrolman and get your money refunded in full besides.

What Is A KOZAK DRYWASH CLOTH?

Each of the selected, soft staple fibres is scientifically treated with modern detergents. Then these fibres are woven into a thick cloth. Then the cloth is treated, aged and seasoned for many weeks so that it retains its original strength even if it is indefinitely exposed to air. Kozak is the ORIGINAL and ONLY DRY WASH CLOTH... there is no other way to have a clean car every day for 4¢ a Drywash except with a Kozak.

Here Is What A KOZAK DRYWASH CLOTH Does:

- Removes dirt.
 - Polishes as it cleans.
 - Saves time and work.
 - No water needed—summer or winter.
 - It's safe—used by over 10 million people.
 - Protects the finish.
- No matter how you washed or tried to clean your car before... with water, cleaners and all the other gadgets you've tried... Kozak must give you a bright, clean car or your money is refunded without question.

Auto Owners Hail the Amazing KOZAK DRYWASH CLOTH

It cleans your splashed, dirt or dust covered car in a few minutes... without "breaking your back"... and without getting dressed up like a deep sea diver in boots and rubber apron... and without getting out a hose, sponge, chamois, bucket for water and all the other excitement that happens when a fellow washes his own car.

If you have your car washed at a garage it generally costs \$2 plus the time and trouble of taking it there and coming back for it. Now with a KOZAK you SAVE that \$2 and when you figure that you should have your car washed 25 to 50 times a year there is a saving of from \$50 to \$100, to say nothing of increasing your trade-in allowance.

KOZAK is used Dry on a Dry car. With a Shamer when needed, it not only quickly and completely removes mud dust, the muddy water splatter, the rain ugliness and grime, but every time it is used it adds to the beauty and permanence of the original paint job because it continues the paint polishing procedure that is the last factory touch before the car goes to the Dealer's show room.

KOZAK IS GUARANTEED

If the KOZAK Drywash Cloth has not saved its cost many times over after you have used it for thirty days... just write and the money you paid for it will be refunded... and you do not even have to return the KOZAK. We are able to make this guarantee to you because in 28 years TEN million KOZAKS have saved owners of cars millions of dollars in car washing. KOZAK AUTO DRYWASH, 351 S. LYON ST., BATAVIA, N. Y.

OBEY THAT URGE

Tear out and mail the coupon right now... you get your money back if you don't like it—and see how easy and how fast you can Drywash your car... and at the same time SAVE at least \$50.

.....

KOZAK AUTO DRYWASH 351 S. LYON ST., BATAVIA, N. Y.

Gentlemen: Please send me POSTPAID

REGULAR KOZAKS (Millions Use Them)	SUPER KOZAKS (Last 4 Times Longer)
<input type="checkbox"/> 1 for \$2	<input type="checkbox"/> 1 for \$3 <input type="checkbox"/> 2 for \$5

Name.....

Address.....

City..... Zone..... State.....

☐ CASH ☐ CHECK ENCLOSED

SPECIAL INTRODUCTORY OFFER

2 Reg. (\$4) Plus 1 Super (\$3)=\$7 Value—\$5.00 ☐

More people hear of—and buy—Kozaks from recommendation of friends—than any other way

ARIZONA: "My car looks better than it ever did, before my KOZAK." A. E. Woodfield

CALIFORNIA: "I have used the KOZAK on my 1949 Studebaker since I purchased it 3 1/2 years ago. The car still looks new after 47,000 miles. Your KOZAK is all you claim for it." Stafford W. Wilson

COLORADO: "A friend asked me today what I did to my car to keep it looking so nice all the time. So I told him about the KOZAK and he asked me to get the one I am ordering for him now." Arthur Brandt

CONNECTICUT: "I have used the KOZAK Auto Dry Wash Cloth for a good many years and have always found it to be all you advertised and more." Royce W. Wilson

DELAWARE: "We are steady users of your KOZAK Cloths, both for cars and furniture, and we swear by them! I want three more for my family." Mrs. W. V. Sipple, Jr.

FLORIDA: "Send me three KOZAKS. I am here for the winter and can't get along without the KOZAK, as I use it all the time at home. Nothing like it!" Lewis S. Milner

GEORGIA: "The KOZAK is really a wonder. I enjoy using it." W. H. Davis

INDIANA: "I was a 'doubting Thomas' when I read your letter describing the dry-wash method. I took a chance and ordered one KOZAK. I am amazed at the results. Your statements are not the least bit out of line with actual facts." F. L. Wiatrowski

IDAHO: "I am sending you an order for a new supply of KOZAKS. A few days ago when I stopped at the garage where I bought my car (a 1950 Dodge) the proprietor said: 'How do you keep your car so bright in this dust? I wash mine about twice a week, but yours is always clean, looking just like it came out of a hand-bowl!' I told him I use a KOZAK Cloth on it! It takes me about ten minutes to go over my car." Don Martin

ILLINOIS: "I really got more than I expected in the KOZAK. I was amazed the way they cleaned my car after 10 days dirt. I would call the KOZAK the magic cloth." Arthur Higgins

IOWA: "I have used the KOZAK for some time and sure like it. Please send two more KOZAKS for my son." E. S. Siman

KENTUCKY: "Enclosed check for a KOZAK Cloth. Have used one for several years and think it a wonder!" Mrs. S. S. Yantis

LOUISIANA: "The KOZAKS are surely fine. I will not be without them as long as I have a car." A. M. Trudeau

MAINE: "Send me two more of your KOZAK Cloths. I have used one KOZAK all winter on my car and have not had to wet-wash it once. I am sure it is a real wonder!" Theodore Wood

MARYLAND: "I am a private chauffeur. I take care of five cars. I am still using the KOZAK Cloth I got from you, and it is just wonderful." J. Whittington

MINNESOTA: "We are very much pleased with your KOZAK. The KOZAK is perhaps the simplest, unbelieveable. We really think it is wonderful." Mrs. W. H. Hill

MICHIGAN: "Although I've used my present KOZAK for over a year, it is still in good shape. I figure that if I hadn't had the KOZAK I would have spent approximately \$65.00 for car-washes in the past year. I can now have a clean car every day and it gives me a feeling of pride and joy to drive to work with a shiny car." J. D. Earl

MASSACHUSETTS: "About two weeks ago I ordered 15 of your KOZAK Auto Dry Wash Cloths for myself and fellows who work with me. We like them very much. The other fellows who didn't previously order have 'seen the light', as our cars look so much better than theirs even though they have had their cars water-washed right along. So I am now sending for 13 more KOZAKS for them, and another one for my wife who wants it to keep in the house." E. F. Tuttle

MISSOURI: "I am so enthused over the usefulness, the effectiveness and the value of the KOZAK Cloth that I am not only ordering another one for myself but one also for a neighbor who has repeatedly admired my lusty new-car look that I have kept on our car." Victor B. Richter

NEW JERSEY: "I have been using the KOZAK for the past six months, and I am amazed at the very fine condition it has kept my car in. Dirt, rain and the car is as brilliant and shiny as new. Send me three more KOZAKS." H. H. Fieber

NEBRASKA: "I would not be without the KOZAK. With very little effort I am able to keep my car clean and new-looking at all times, and have eliminated many costly wet-wash jobs. Please send me five more as soon as possible." Edward G. Erlwein

NORTH CAROLINA: "Never saw anything to equal the KOZAK for an automobile. My car hasn't had a water-wash in six months, and looks better. Here's check for another KOZAK." C. B. Ricker

NEW YORK: "I have been using KOZAKS for some twenty years, and just bought a new one. So you can see whether I like them!" H. C. Robertson

OHIO: "I highly recommend your KOZAK Cloth. It has kept my 1951 Plymouth looking clean and new all the time, to say nothing of the money saved in not having the car washed." Mrs. Jessie W. Friedman

OKLAHOMA: "I like my KOZAK Dry Wash so well that I want another one, and also want to send my son one. Enclosed find check." John W. Byrd

OREGON: "Please mail 1 KOZAK Auto Dry Wash Cloth. I've used three before and like them very much." Mrs. Frank Newell

PENNSYLVANIA: "I have been using your KOZAK Cloth for about ten years. My 1948 car has been water-washed twice in that time and then only when it was Simonsed. Many people ask me if I had my car painted."

SOUTH DAKOTA: "I use your KOZAK on our car with unbelievable results. My wife uses it on furniture, so I will have to order another one for myself." J. O. Beaver

TEXAS: "I want to let you know how pleased I am with your KOZAK product. I wouldn't be without it. It is the only way I can keep my car clean in this dusty Texas Panhandle weather. It makes car cleaning a far simpler job than I ever expected or imagined." Eugene S. Pennington

UTAH: "I have used your KOZAK Cloths for my cars for the past 15 years. They have given me entire satisfaction. Everybody admires my car. I inform them that KOZAK Auto Dry Wash does the trick. I can recommend them highly." A. D. Sargent

VIRGINIA: "Used my KOZAK today and am well pleased with it." Mrs. Geo. Gray

VERMONT: "I am giving a KOZAK to my brother for his trip to the West Coast. I know it will be a great help. It will be the same for my own KOZAK Cloth has been a great boon to me." Mrs. Mabel Smith

Reg. U. S. Pat. Off., Canada

Driving around with Walt Woron



'55 MERCURY

LAST YEAR in our comprehensive road test of the '54 Mercury, we made the statement that "the Mercury is an evolutionary car." What it has evolved into ties into a question we posed, "What if the Mercury took a big departure from the Ford in styling?" Seems like we were on the right track on both counts: the '55 Merc has definitely evolved into something—something that looks and feels entirely different from the '55 Fords.

When I showed up at the Ford Proving Grounds to drive the new Mercury for an impression of the car, they didn't yet have a production car that was suitable for testing. Instead, I drove an engineer-

Taking the '55 Mercury over a ramp designed for ride testing at 30-35 mph, MT's

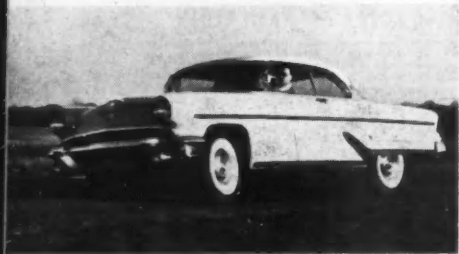
ing car, which was a Montclair hardtop, with the 198-hp engine, dual exhausts, and Mercomatic transmission. (You sharp-eyed readers will note that the picture here is of the Monterey four-door; this is the production car we used later for our pictures, since the engineering car did not have the latest production styling changes.

The Merc is in one of the hottest competitive fields, and they, therefore, have to look constantly to their laurels in all departments. According to one engineer, they felt that the ride could be bettered without sacrificing any of the good handling characteristics; they did this by reposi-

tioning the rear shocks a little flatter (which tends to reduce tramp and shake), lengthening the wheelbase, and widening the rear tread. The ride is definitely softer, while handling has not been noticeably affected. Body lean is apparent only on the sharpest of curves.

Mercury still favors understeer, with all four wheels drifting around fast turns instead of the rear end breaking loose (as in the case of an oversteer car). Streetcar tracks don't have a tendency to whip the car aside. With power steering, better-than-ever front visibility through the wrap-around windshield and over the sloping hood, and the ability to see the rear

'55 LINCOLN



REPPEAT PERFORMANCE: Lincoln proves its outstanding roadability. Yes, again. Ever since '52 we've praised the Lincoln to the skies for its handling qualities. They had it in '53, in '54, and now again, in '55. This year they changed the angle and the valving on the rear shocks to provide a somewhat softer (and quieter) ride, but believe me, the handling hasn't suffered one bit. Driving the Lin-

coln around the various roads of the Ford Proving Grounds in Dearborn, Mich., convinced me of that.

On the asphalt handling course (with flat turns of 100, 150, 200, 300, and 400-foot radii) it would stick in the sharper turns at speeds of 40 mph and in the wider turns at 55 mph. Taking a turn at just the right speed (for maximum sticking) and in DRIVE range, it would slowly drift to the outside of the turn. If I punched the throttle or moved the selector to LOW (dropping the new TurboDrive transmission into intermediate range) the extra power on the rear wheels would cause the rear end to break loose; a bit more throttle, a slight correction of the wheel into the skid, and I was through the turn.

To test its longitudinal stability when I was halfway through some of the turns I'd mash down on the power brakes. This would throw the car into a slide, but the minute I corrected the wheel and stomped

the throttle, it would correct itself. As a further test, I whipped the steering wheel (power steering) to the right, then let go of the wheel; the car would suddenly turn to the right, back to the left with less movement, slowly move back to the right, then move in a straight line ahead. At speeds of 55-60 mph, this is further proof of the car's inherent stability.

The new transmission (big brother to Fordomatic and Mercomatic) is a big improvement over the previously-used Hydra-Matic. When I asked the Lincoln engineer with me why the Hydra-Matic didn't work as well with the Lincoln engine as it does with the GM cars, he explained that a transmission that is *designed* for a particular engine is always better than one *adapted* to it. This new transmission, with its three gears, allows you to start in either first or intermediate gear when the selector is in DRIVE. If you don't push the throttle down all the way to the floor, you start in intermediate gear; if you push



Editor checks the car's (and his) stamina—but at a speed of 65-70 mph! Mercury's stability and ride are improved

fenders without craning your neck, the Merc is a cinch to park.

Checking some acceleration times with a stopwatch against the speedometer (without the accuracy of a fifth wheel and electric speedometer), and assuming the usual inbuilt error, I came up with around 13½ to 14 seconds from a standstill to 64 mph. This is over a second less than it takes the '54 job to reach the same speed. Both the horsepower increase and improved Mercomatic are behind this increased performance. If you press the throttle all the way to the floor, you'll start out in low gear, shift to second (or intermediate) at around 35 mph, and into third around

65. With normal foot pressure, you'll start out in second gear. Upshifts and downshifts are both smoother.

Last year at the Ford Proving Grounds I panned the Mercury for not being able to take off in DRIVE range up a 30 per cent grade. To see if they'd made any improvements here this year I tried the same things I did then: went up the 17 per cent grade, stopped halfway up, pulled on the hand brake, put the selector in NEUTRAL, turned off the ignition; waited a half-minute, restarted, put the transmission in DRIVE, released the brake and started up the hill. I repeated the same thing on the 30 per cent grade. Naturally,

it didn't take off as fast, but I didn't have to use LOW range; it made it easily in DRIVE. This should be good news for prospective Mercury owners in Pittsburgh and San Francisco or wherever unusually steep grades are encountered.

Although I didn't have a chance to check actual stopping distances, the increased lining area seems to have some effect on fast brake stops; the Merc seems to squat down to a stop considerably quicker. With the engine off, there's a reserve supply of vacuum that allows you to stop your Mercury without the aid of a small boy helping you to push down the power brake pedal.

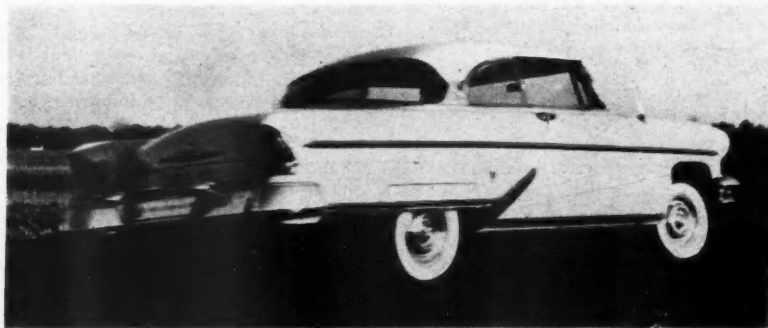
Photos by Hy Fisher, Ford Photographic

it down past the detent, you start in first gear. Under full power acceleration, you upshift into second at around 30-35 mph, and into third around 65-70 mph. You can downshift from DRIVE to LOW at about the same speed as the upshift, except that the transmission holds in second gear (as a safety device) until the car slows down to about 20 mph. Upshifts are much smoother than before, while the only way I could tell the transmission was downshifting was to watch the speedometer, wait and feel for it—there's no outward expression of its gear-change.

Acceleration is just about the same as last year, despite the additional 20 horses; 0 to 60 times were made in about 12 seconds. The reason for this is two-fold: the rear axle has been reduced to 3.07 (from 3.31), resulting in better cruising speeds and more fuel economy; the transmission doesn't have as low a getaway gear as did the Hydra-Matic (but has the bonus of one less gear change).

We said last month (in Spotlight) that if L-M salesmen can explain away the lack of a wrap-around windshield, the car should click. I don't personally see how forward vision could be greatly improved by a wrap-around; it's great now, since the windshield posts don't get in your way. Instrumentation remains close to

tops, except that legibility has again suffered for the sake of styling—the numbers and letters are white, on a white background. The new rear view mirror that has an adjustment knob on it is an excellent feature for the two (or more) driver family, allowing the raising or lowering of the mirror for best positioning.



CONTINUED



Surrounded by style and power, Walt Woron checks fine points of '55 Olds. Big Rocket engine now puts out 202 hp

YEAR-IN AND YEAR-OUT, since the introduction of the Rocket engine in '49, it's hard to think of the Oldsmobile without thinking of punch, speed, jump, go, acceleration—you pick the word for it. Whichever one you select, it all adds up to the same thing: the Olds Super 88 has been, is, and will continue to be *hot*.

Assuming the normal speedometer error, when Don MacDonald and I drove the '55 Super 88 on some backroads in Lansing, Mich., we consistently got stopwatch times of around 10 seconds from a standstill to an indicated 63 mph! This far outclasses *every* car we tested last year. Hy-

'55 OLDSMOBILE

dra-Matic (which is on 99 per cent of all models) has been improved to give both smoother upshifts and downshifts. The downshift from fourth into third goes practically unnoticed. Upshifts come at around 25 mph into second, at 40 into third, and at 70 into fourth (with a floor-boarded throttle). Incidentally, the women's influence is noticeable in the throttle: it has a wider base, with an indentation for keeping a high heel from slipping out.

Other acceleration figures include a close-to-one-second improvement (five seconds total) in the passing range of 30 to 50 mph, and nearly $2\frac{1}{2}$ seconds better in the high-speed passing range of 50 to 80 (now about $12\frac{1}{2}$ seconds). These acceleration figures, with today's heavy traffic load on highways, are coming to mean much more than getaway from a stoplight. A high percentage of highway accidents comes from head-on crashes where a driver didn't have the reserve to get around another car or truck; if he doesn't become too used to this reserve power, it can be a decided safety factor.

The power brake cylinder now incorporates a poppet valve that holds the remaining vacuum in reserve should it be-

come necessary to apply the brakes more than once after you've lost engine vacuum. With the engine off I was able to apply the brake six times with power.

One thing the change in front suspension (shocks now inside the coil springs) has done is to give a truly solid feel to the car. There's a minimum of high-speed floating over bumps and dips, while breaks in the pavement aren't transmitted to driver or passengers. There's no whipping problem if you get off the highway shoulder; this is one of the definite advantages of power steering.

Handling under all conditions is still quite good. Although I was unable to really put it through its paces in this regard, there is little reason to doubt that it should be as good as, and probably slightly better than, the '54 Olds, about which we said, "Its stability under all far-from-normal driving conditions was commendable." Pronounced fingergrrips on the steering wheel are a noticeable improvement for high-speed driving. The non-power steering car is easier to drive because of the lessened resistance offered by needle bearings (instead of bushings) on the pitman arm shaft.

'55 CADILLAC



Frank Burrell, General Foreman of the Cadillac Experimental Garage, briefs MT's Editor prior to trial in '55 model

IN MY OPINION, the honor of coming the closest of American stock production cars to silently stealing along on little cats' feet would have to go to Cadillac. This quiet, smooth ride isn't something new for them. Last year we praised the Cadillac's extreme silence and inborn smoothness while you glide along. This year, by virtue of the addition of more soundproofing, the ride is even quieter.

Ripples, ruts, and tar strips are absorbed, and though you may hear them, they're in no way annoying to driver or passenger.

I didn't particularly expect the horsepower increase (20 over last year) to do much to it performance-wise. Frank Burrell, General Foreman of the Cadillac Experimental Garage (who accompanied me on the impression ride), pointed out that it would be more apt to affect the passing range acceleration times. This it did, trimming the times of 5.9 and 12.7 seconds, respectively, for 30 to 50 and 50 to 80, by approximately one-half second. Let me hasten to point out, though, that the times we recorded are *not* as accurate as the road test times we have compared them to. But, on a brand new car (a '55 Cadillac coupe de ville with only 11 miles on the odometer) you can't expect to get as good times as we got on our thoroughly broken-in and properly tuned road test car. My guess is even more improvement than showed up here.

The 0 to 60 mph times we got were about the same as for last year's test car; for the same reason as given above, I'd venture that this year's road test car will show faster acceleration from a standstill. With full throttle acceleration, the Hydra-Matic will shift out of first at about 20 mph, into third around 45 mph, and to fourth at 70-75 mph. If you put the se-

lector in D-3, the transmission will still automatically upshift at 70-75. Full power upshifts are somewhat smoother.

With power steering the Cadillac remains easy to drive, relieving you of the fight necessary to get out of streetcar tracks, grooves, or back onto the pavement should you go off the shoulder. Handling qualities are good, but could be improved by stiffer front springs (such as are available on "export kits"). It still remains a truly big car in appearance and feel, taking some getting used to when you first get behind the wheel. Parking is helped by the standard power steering, and good rear vision out the wide rear window that allows you to see the jutting tail fins.

I found no trouble in pivoting and lifting my right foot from the gas pedal to the power brake pedal (located adjacent and fairly high off the floor). Personally I'd like to see it moved to the left for left-foot operation, but Frank Burrell explained why it's where it is. In essence, he said that there isn't sufficient room underneath the column and if it was moved to where you could put your left foot on it, the column would interfere, so that you couldn't reach it with your right foot. It's high off the floor to provide enough leverage should you lose engine power and all reserve vacuum.

'55 BUICK

WHAT CAN YOU ADD about a car that you've praised highly in lesser form? You've used most of the phrases you wanted to in talking about the previous model: "has lots of suds . . . takes bumps, dips, and railroad tracks smoothly and almost silently . . . up to fairly high speeds around sharp corners no squeals of complaint come from passengers . . . a good-handling car . . ."

But then, the manufacturer pours more power into the car, improves the transmission to take advantage of the power, and retains all the other good features. So what can you do but look for another laudatory phrase? Or perhaps be more critical than you were before?

The '55 Buick certainly qualifies as one of the bombs of this century. And the Century is the bomb of the Buicks. Here's a car that in '54 showed its tail lights to every other American car somewhere in the acceleration range from a standstill to its top speed. Nowhere did it have to choke on the other cars' exhausts. This

year it'll equal or better that outstanding performance record.

Look at a few of these rough stopwatch figures (checked without benefit of a calibrated speedometer or fifth wheel) on a brand-new Century: 0 to 60 in around 11 seconds using DRIVE range alone, in about 10 seconds using LOW, then shifting to DRIVE (close to two seconds better than the '54 Century); 30 to 50 in about four seconds (nearly a half-second better); 50 to 80 in about 12 seconds (around 1½ seconds better than '54). We'll have more accurate figures for you after we've completed our full-scale road test.

Until you push the throttle all the way to the floorboard, you won't feel any noticeable difference between the '54 and '55 Buicks. The throttle linkage is set up so that you engage what Buick calls the "performance position" of the variable pitch Dynaflo in the last half-inch of travel. It's here that you can definitely hear and feel the stator blades being shifted to a high angle. This automatic "shift" (the quotes are because it's not actually a shift and doesn't feel like it either) to the higher angle can also be used for passing at cruising speeds.

That's a preview of the Century's performance story for '55. Everything else we had to say about last year's car (at the start of this impression write-up) still holds. It cruises comfortably and safely (providing the speed limit and road conditions warrant) anywhere up to 80 mph. It has good inherent stability, which was proved by yanking at the wheel and allowing the car to seek its own course—which was a straight line. It has a billowy ride. It has a fascinating speedometer (with the new curved, moving red line) which is easy to read; the four instruments to the right (in a group in one dial face) are still hard to read because of their smallness and the tiny tick marks.

Since this Century is like too many of the Buicks I've driven in the past few years, it causes me to make a complaint seldom voiced: I was constantly on my toes to keep the car in a straight line when braking down from high speeds. The brakes are adequate enough, but seem to require perfect (and constant) adjustment. The only other objection I could find with the car was the creakiness of the dash; this seems to be a problem structurally inherent with wrap-around windshields.

FARINA CADILLAC

IF EVER A CAR deserved the verb "glide" in reference to its ride and feel, it's the Cadillac by Farina (the first and only body built on an American chassis by Farina since he's been working with Nash). From the moment I slipped behind the wheel of jazz entrepreneur Norman Granz' \$15,000 car, I was impressed with its smoothness. Despite the fact that the car was in need of a tune-up, it still performed quite admirably. Being stock '53 Cadillac with all-aluminum body, it

figures that its performance *would* be slightly better than a '53 Cadillac sedan (which is nothing to sneeze at—0-60 mph in 12.8 seconds, quarter-mile in 18.4).

Road-holding ability is slightly better than the stock version, mostly because of its lower center of gravity. (It's so low you can look at Volkswagen or Nash Metropolitan driver right in the eye.)

Luxury abounds in the stock wheelbase (126 inches) '53 Cadillac. The three-passenger seat is deeply cushioned, yet sup-

ports you so you don't tire easily. When the back of the seat folds forward, it reveals a lined compartment suitable for carrying luggage (besides the shallow trunk compartment). The hood drops off so quickly from the windshield to the jetlike nose that it seems that you see the road right in front of the bumper. Unlike some cars with low tops, you don't get a feeling of claustrophobia when the top's up. Vision is good with the top either way. The photo tells the remainder of the story.



ENGINE SHAMPOO QUART SIZE CONCENTRATE MAKES 2 GALLONS



GUNK SUPER CONCENTRATE DILUTES with low-cost kerosene or fuel oil dilute and cleans engine blocks faster and more completely than steam cleaning. In quart and larger sizes at wholesale automotive jobbers throughout the country. Extra strength, ready-to-use Gunk in pint containers is available from any of the Harley-Davidson motorcycle dealers everywhere.



FREE! 1955 CATALOG & POWER TUNER



SAVE UP TO 50%
JUST OUT... Shows all leading brands for ALL cars—incl. Power Kits, Racing Cams, Heads, Manifolds, Strokers, Engines, Superchargers, Headers, Mufflers, Duals, Chrome, "Drop-In" Accessories—incl. Parts not in stores. Gives tips on boosting your power, speed & mileage. "E-Z" POWER TUNER free with catalog—SEND 25¢ TO COVER POSTAGE & HANDLING.

ALMQUIST ENGINEERING
1-T MILFORD, PA.

McBar Adaptor Housings

- MODEL ENGINE TO TRANSMISSION**
- CF-52—Cad and Olds to '52-'54 Ford & Merc
 - CF-50—Cad and Olds to '49-'51 Ford & Merc
 - CF-40—Cad and Olds to '32-'48 Ford & Merc, Lincoln, Ford pick-up and 1½ ton truck
 - 52-LF-52—Lincoln OHV to '52-'54 Ford & Merc
 - 52-LF-50—Lincoln OHV to '49-'51 Ford & Merc
 - 52-LF-40—Lincoln OHV to '32-'48 Ford & Merc
 - LF-40—"49-'51 Line, FH to '32-'48 Ford-Merc-Linc., etc.
 - CRF-52—"51-'53 Chrysler V8 to '52-'53 Ford & Merc
 - CRF-50—"51-'53 Chrysler V8 to '49-'51 Ford & Merc
 - CRF-40—"51-'53 Chrysler to '32-'48 Ford & Merc
 - CSM—Cad & Olds to '53-'54 Stude manual transmission
 - CSA—Cad and Olds to Stude automatic transmission
- FREE CATALOG—CUSTOM INSTALLATION**
Inquiry invited. Preper clutch recommendations.
McBar Machine Shop, Inc.
85 N. Miami St., Peru, Ind., Phone 5155 or 6200

DOUBLE THE LIFE of your CONVERTIBLE TOP



Tough, clear vinyl plastic cover protects top from winter ice, summer sun, dust, salt air, harmful chemicals. "Topper" keeps you snug and water-tight. Pays for itself in longer top life. Quick and easy to install, fits perfectly any '42 to '54 model. Won't crack, peel, chip, or discolor. Reinforced at stress points, seams electronically welded. \$17.95, postpaid with check or money order. Postage extra on C.O.D. orders. Order today for self or gift. Specify make, year, and model. Satisfaction guaranteed or money back. **\$17.95**

Mammoth Sales Co.
P.O. Box 52, Dept. F, Cincinnati 7, Ohio ppd.

DON'T BE CAUGHT WITH A DEAD BATTERY

Amazing "New Life" battery rejuvenator stops build-up of plate sulfates... keeps battery automatically charged. Use lights, heater, radio, as much as you like. Get faster starting! Greater power! **RECHARGING IS UNNECESSARY!** Only one treatment needed! Money back guarantee. Rush \$1.00 to:

JSM PRODUCTS CO., Dept. 13
1110 Castleton Rd., Cleveland 21, O.

'55 Chevrolet Road Test



John Booth and MT's Editor attach Ethyl Corp.'s fifth wheel to test car to obtain exact facts and figures on gas mileage

(Continued from page 23) Headroom is good back here too (again with a hat), while shoulder room is also good. You'd have to be pretty tall and wear size 17 shoes before you'd run out of room to stretch your legs and push your feet under the front seat.

Let's get started before we inspect any more of the car. The rest we'll catch on the road during our testing.

Since this test Chevy has Powerglide we'll have to move the selector lever to P (parking) or N (neutral) before it'll start. (See the quadrant down at the bottom of the instrument cluster? It's been moved from the steering column.) Now we switch on the key-starter (which you can do without a key if you're forgetful and leave the switch in OFF instead of LOCK position). The engine starts right away, and purrs healthily. It seems quieter than many V8s. We can disengage the cane-type emergency brake with our left hand by twisting it slightly and pushing it forward, keeping our left foot on the pendulum foot brake, and moving the selector to D (drive). The engine is idling a trifle slow, so the generator warning light is burning red. As we give it a bit of throttle, the light goes off and we move ahead.

The wrap-around windshield is a big improvement in vision: we can see both

front fenders with ease. At the far side of the windshield, there's a slight amount of distortion. Moving outside, we find that it's raining, and turn on the wipers. They operate smoothly and sweep into the previously unswept areas (on '54 GM cars) next to the reverse posts. The rear view mirror doesn't block vision; on the other hand, it should be wider, to take full advantage of the wide rear window. Looking to the rear, there's no blind spot to the right of the window. We can see both rear fenders without rising up in the seat. That's a big help in parking, particularly in tight spots. Vision of this order was not common to previous Chevs.

You notice that the steering wheel seems to have been lowered and made more vertical? Doesn't interfere with your legs, either. The top portion of the full-circle horn ring blocks out part of the semi-circular speedometer, but wouldn't you rather crane around it once in a while instead of feeling in vain for a half-circle horn ring when you have the wheel in any position but dead ahead? Aside from this one factor, the white-on-black speedometer is easy to read, and as it's high on the painted panel (which would be better if it were duller), you don't have to drop your eyes far from the road ahead to see it. The same holds true for the other two instruments: fuel gauge and water temperature. (Later, we found the instruments were easy to read at night and no lights glared on the windshield.)

And now to Funston Chevrolet, where we'll leave the car in the capable hands of George Bente (assistant service manager) who will install our fuel flowmeter, tachometer, vacuum gauge, and brake-testing equipment. After that we'll join Detroit Editor Don MacDonald and John Booth (builder of the X-Ray Special—see Oct. '54 MT) and be on the way to our various testing spots. During all of our testing we'll keep a close check on tank mileage, note how the car performs and handles over all roads, city streets, paved highways, dirt backroads—and from the looks of the weather, in rain, sunshine and snow.

Under normal procedure, the first thing we'd do (when working out of our home

'55 CHEVROLET V8 TWO-TEN WITH POWERGLIDE

GENERAL SPECIFICATIONS

ENGINE: Ohv V8. Bore 3½ in. Stroke 3 in. Stroke/bore ratio 0.8:1. Compression ratio 8.0:1. Displacement 265 cu. in. Advertised bhp 162 @ 4400 rpm (180 bhp @ 4600 rpm optional). Bhp per cu. in. .611. Piston travel @ max. bhp 2200 ft. per min. Max. bmep 146.2 psi. Max. torque 257 ft. lb. @ 2200 rpm (260 ft. lb. @ 2800 rpm optional).
DRIVE SYSTEM: STANDARD transmission is three-speed synchromesh using helical gears. RATIOS: 1st 2.94, 2nd 1.68, 3rd 1.00, reverse 2.94. AUTOMATIC transmission is Powerglide, three-element torque converter with planetary gears. Maximum converter ratio at stall 2.1. RATIOS: Drive 1.82 x converter ratio and torque converter only, Low and Reverse 1.82 x converter ratio. OVERDRIVE transmission is standard shift with planetary gearbox: RATIO: 0.7.
REAR AXLE RATIOS: Standard 3.70, Automatic 3.55, Overdrive 4.11.
DIMENSIONS: Wheelbase 115 in. Tread 58 front, 58½ rear. Wheelbase/tread ratio 1.96:1. Overall width 74 in. Overall length 195½ in. Overall height (empty) 62½ in. Turning diameter 38 ft. Turns lock to lock 4½. Test car weight 3470 lbs. Test car

weight/bhp ratio 21.4:1. Weight distribution 52.7% front, 47.3% rear. Tire size 6.70 x 15, tubeless.
PRICES: (Including suggested retail price at main factory, federal tax, and delivery and handling charges, but not freight.) ONE-FIFTY, utility sedan \$1692, two-door sedan \$1784, four-door sedan \$1827, two-door station wagon \$2129. TWO-TEN, club coupe \$1934, two-door sedan \$1874, four-door sedan \$1918, two-door station wagon \$2178, four-door station wagon \$2226. BEL AIR, two-door sedan \$1987, four-door sedan \$2031, hardtop \$2166, convertible \$2305, four-door station wagon \$2361. (Six-cylinder models \$99 less.)
ACCESSORIES: Powerglide \$178, overdrive \$108, "Plus-Power" kit (dual exhaust system, four-throat carburetor, special air cleaner and intake manifold) \$59, power steering \$92, power brakes \$38, power seat with automatic window lifts \$145, radios \$62, \$84, and \$111, air conditioning \$565, heaters \$48 and \$73, white sidewall tires (exchange) \$27.
PARTS AND LABOR COSTS AND ESTIMATED COST PER MILE for the Chevrolet V8 Two-Ten will appear in an early issue.

office) with a car ready for testing would be to take it to the Clayton Manufacturing Company in El Monte, Calif., for a chassis dynamometer check. Being in Detroit posed a problem, because dynamometers—and their resulting readings—vary from place to place. Thus, we took this test car to the logical place—the Clayton plant in Detroit—to obtain a reading that would compare with results of later, California-based tests.

Now, since this 162-hp, Powerglide-equipped Chevy has 1692 miles on it, let's roll out to our top speed strip and see what it will do. On our way there, we'll watch for other things, like body drafts (which it doesn't have), wind noise (which is fairly high above 60 mph with the quarter windows open), unusual noises (it has a driveshaft hum between 40-65 mph when you hit the throttle), ride, and handling.

You'll remember that last year we complained that the '54 Chevy floundered a bit over an unexpected dip at 40 mph. This year's car has been improved considerably in this regard. It recovers rapidly over dips with very little oscillation, and it isn't until it hits speeds of 70-80 mph that it sort of wallows after coming out of a dip. At around this same speed is where its feeling of solidness falls off, "wind wander" begins and it feels a bit light. Tar strips or rough road surfaces are audible, but the driver doesn't feel it through the steering wheel. (Undercoating would certainly help here.) You'll notice that sideway won't bother you.

This '55 Chevy doesn't let any moss grow under its feet: an average of 97.3 mph is not only adequate in itself, a good five mph faster than last year's car (also equipped with Powerglide), but is faster than any '54 car in its class. The overdrive car (with a higher final rear axle ratio of 2.88 to 1 vs. 3.55 to 1 for Powerglide) should be slightly faster, and when that's coupled with the 180-hp engine, the Chevy should easily break 100.

Acceleration-wise, this car's got it, too! Can you imagine a Chevy outdigging every '54 car but a Cadillac and Buick Century, and being able to stay with a Chrysler, Lincoln and Oldsmobile? We couldn't believe it either after just one

run, so repeated it again and again. The combination of electric speedometer, fifth wheel, and the bank of stopwatches just doesn't lie. There is no point in using LOW, then manually shifting to DRIVE; automatic shift comes at peak rpm (4400) and 55 mph. Incidentally, we could practically read the car's speedometer instead of the electric one for all the error in it; it isn't more than one mph off until it gets well above 75 mph.

The automatic upshift, even under full throttle, is smooth, while downshifts are practically unnoticeable. To downshift manually, you can move the lever to LOW, but it won't go into that gear until the speed has dropped to approximately 55

mph (as a protection against over-revving). At any speed under 55 mph, showing the throttle all the way to the floorboard will downshift the transmission to LOW, giving you a terrific boot. The Powerglide in this car is much quieter than that of the '54 Chevy.

Let's try highway passing acceleration. It really has it here, hasn't it? The average of 4.4 seconds from 30 to 50 mph is less than all '54 test cars, and only five cars were faster in their 50 to 80 acceleration. Its acceleration factor seems to drop off above 70, requiring almost the same time to reach 80 mph from 70 (7.4 seconds), as it takes to go from 50 to 70 (8.1 seconds). The 15.5-second time

Read This Book FREE! Learn the Secrets— HOW STOCK CARS GET up to 42 M.P.G. in WORLD-FAMOUS "ECONOMY RUNS"!



Plus 100 More Money-Saving, Car-Saving Secrets!

Now, you can benefit from all the previously unpublished secrets used by "Economy Run" Professionals! Learn how they gain fantastic mileage under punishing desert, mountain and highway driving. It's NOT the car, NOT the gasoline that permits these drivers to get the kind of mileage owners of identical cars only dream about! It's the little-known tricks and techniques used by all professionals, that make the big difference! Put this "know how" to work for you. Slash operating costs by up to 50%... make your car run better and last longer than you ever thought possible! Send for this amazing book now—today! You don't risk one penny!

SIMPLE TRICKS PLUS "PLIER & SCREW-DRIVER" ADJUSTMENTS ARE SECRET OF HIGH MILEAGE! Cars used in "Economy Runs" are stock models. They don't use special fuels or equipment. Here are a few examples of the many tested and proven economy secrets contained in this amazing new Automotive Encyclopedia! Try them on your car NOW—you'll be amazed at the difference!

AN EXTRA 5 MILES PER GALLON BY TURNING A SIMPLE SCREW? Many report an increase of up to 5 MPG by this simple adjustment: Let your engine idle for 3 minutes, then turn idle adjustment screw slowly to right until engine dies. Then, turn screw one-half to three-quarter turn to left and start engine. Note the smoother idling, increased performance, and economy!

BUY YOUR GAS IN THE MORNING—before the sun expands fuel in station pumps. Gas later expands in your tank, providing more gas, more mileage. This simple trick alone can save you many, many \$\$\$\$ per year!

INEXPENSIVE METHOD OF "SUPERCHARGING." Simply insert an ordinary bronze screen (type used on windows) between carburetor and intake manifold. Fine mesh breaks up air stream, permitting more efficient fuel-air mixture. Compare the difference in power and mileage!

PROPER IDLING CUTS FUEL CONSUMPTION BY UP TO 75%. Always let your COLD engine idle a few minutes before driving. Quick starts use 75% of gasoline to force cold oil through engine. You'll use less gas to drive 3 miles, than you otherwise would to drive 3 blocks!

TELLS EVERYTHING YOU SHOULD KNOW TO GET THE MOST FROM YOUR CAR! Yes, in addition to 100 professional economy tips, including when to shift, how to accelerate, how to determine most economical speed, etc., you'll get full information on special fuel formulas, tuning secrets, how to make tires, carburetors, brakes, etc., LAST LONGER. Amazingly complete, comprehensive!

WRITTEN BY AMERICA'S TOP HIGH-MILEAGE EXPERTS! Almost all high-mileage experts in the U.S. were invited to participate in this mammoth project, providing the public—for the first time—with all the professional secrets of increasing mileage and performance. The result is the greatest compilation of speed, power, and economy secrets ever bound together. Appropriately, it's entitled "The Speed, Power & Economy Handbook." Lavishly illustrated with pictures and diagrams, it's written in clear, easy-to-understand language. Use Coupon below—read yours ON FREE TRIAL TODAY!

FREE!

3 "How To" Booklets—if You Order Now!



FREE! Yes, if you act promptly you'll receive 3 other valuable Automotive books—yours to keep even if you return your BIG BOOK. Read everything for 10 full days. Then, if you don't agree it can save you \$150 a year, simply return for full refund. Mail coupon now!

NEWHOUSE AUTOMOTIVE INDUSTRIES
5805 E. Beverly Blvd., Dept. 253
Los Angeles 22, California

Rush me the Speed, Power & Economy Handbook for no-risk examination. I agree to pay postman on arrival \$1.98 plus postage. If not completely satisfied, I will return it within 10 days for a full refund.

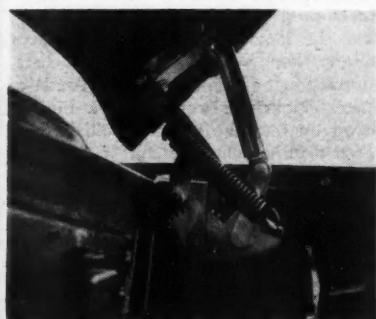
NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

Also, please send the three gift books described at left. I will keep these even if I return the Newhouse Handbook.

Save MORE. Send \$1.98* with order and we pay all shipping costs. Some money back guarantee and free gift books.



For assurance that hood will stay in place while you do engine work, ratchet-type hinge provides a positive hood stop

NEW

CARS



1955 promises to be a mighty big year in the automobile world! New engines, new body styles and innovations are on everybody's lips.

MOTOR TREND, realizing that this year is one of Detroit's most important years ever, will have its experts poised, ready to bring you, the buying public, the latest up-to-the-moment news on facts that mean dollars to you.

Especially important will be the traditionally popular March issue with its exclusive New Car Buyers Guide. With this, you'll be able to draw a close comparison on all the U.S. models!

It's still not too late for you to make certain you'll have this special March issue, along with eleven other informative issues bringing you, month by month, the latest automotive news!

MAIL COUPON TODAY!

Motor Trend Magazine
5959 Hollywood Blvd., Los Angeles 28
Enclosed is \$3 for my 12 issues of Motor Trend Magazine. Subscription to start immediately.

name _____

address _____

city _____

zone _____

state _____

from 50 to 80 is 12.8 seconds less than for the '54 Chevy.

Now, with level roads and no wind, we can get our steady-speed fuel consumption figures. (Since we encountered ping-pong when we used regular gas, we switched to Mobilgas Special, despite Chevrolet's claim that this car should run on regular gas. It could be set up to run on regular, but performance would undoubtedly suffer.) After running a good number of checks at various speeds, it's obvious that the '55 Chevy has a flatter fuel economy curve than that of the '54 Six. It gives less mileage at the lower speeds, about the same at the mid-speed ranges (45 and 60), and slightly more at 75 mph. Traffic fuel economy and overall tank mileage are slightly down, in comparison to the '54 car.

The brakes perform as they should in a car like this. Stopping distances are less than those required for the '54. In making panic stops from 60 mph, with all wheels locked, it keeps a straight course, beginning to swerve only at the very end (when it's easy to control). The suspended pedal makes for easy left-foot braking, but it's not low enough to let you pivot your right foot on the heel from the throttle. The fact that there's much less brake dive is better for two reasons: it helps to keep passengers on their seats during sudden stops; and the reduced pivoting-action is less annoying to passengers.

If you read our driving impressions of the Chevy (Dec. '54 MT) you'll recall that we raved about the way the car handles. After being with us in this Chevy for 10 days, you'll have to agree that this car can be stacked up against many so-called sports cars, won't you?

Remember that we didn't have to correct the wheel on a straight road unless there was a crown? How easy it was to steer, even with our fingers (and this wasn't a power steering car)? That when we deliberately drove it off the shoulder

the car would move aside, but wouldn't whip so as to cause us to lose control? That the same thing happened on street-car tracks and ruts?

When we took it intentionally too fast through corners, all four wheels would drift, indicating understeer. We made the rear end break loose, but only by hitting the brakes hard, locking the wheels, forcing it to start spinning. Even before we applied more power, we could correct its slide by turning into it. Taking our foot off the brake and then punching the throttle brought it completely out of the spin. This, and whipping the steering when we were going down a road at 55 mph, allowing the car then to seek its own straight course, indicates good inherent front end stability.

You'll recall that we commented that there wasn't any wheel vibration until we started over rough roads. We could throw it into corners at practically any speed and take it through without any concern—even through turns that would make most other cars quail. And best of all, we didn't have to fight it through the turns.

After going along with us on this 1241-mile road test, we know you'll agree that the Chevrolet (with particular credit going to Chief Engineer Ed Cole and his able staff) is quite a combination: a good-looking car (in the modern sense), plenty of top-notch performance that will constantly keep the bigger cars in track shoes, agility in traffic, sports car-acteristics as far as handling is concerned, ease of driving, a ride that isn't sacrificed on the altar of roadability, better-than-average brakes and fair fuel economy. It's a lot, especially when you add the fact that many people continue to buy Chevrolets by name alone. The greatest compliment we could pay to this car is that our praise is so high and our criticisms so minor that we find it hard to believe it's a descendant of previous Chevrolets.

—Walt Woron

With the Lincolns in Mexico

(Continued from page 29) Bewildered, I wandered back inside. Final touches were being put on the two-way GE radio installations in Chuck Daigh's test Lincoln and in the caravan's trucks: no time was available for the caravaners to get separated and lose valuable time assembling. (Thus, from Long Beach to Mexico City, and to a lesser extent from there south to Tuxtla, any difficulties were quickly known to everyone in the caravan, no matter how wild and isolated the road or how dark the night.)

Rooms piled high with carefully painted wheels, each keyed to a car and balanced, were chalked with legends like "LR OXA 108." The meaning of this cryptic notation was that the tire would be unloaded from the parts truck* at the Oaxaca service strip; that it was balanced

for the left rear wheel; and that it would go on Bill Vukovich's car (No. 108).

Bill Stroppe and Gordon Smith were off to Mexico weeks before the actual caravan set out on its way. Aided by complete films of the '53 race, taken from the co-pilot's side of the front seat (they have the movie "Rear Window" beat a mile for tense watching), these two charted every foot of the course from Tuxtla to Juarez. No curve would take a Lincoln driver unaware, no bridge would be narrower than he thought. It's all in every car, on compact charts mounted on rollers in a neat case. Every co-pilot can call off what's coming up, safe speed at every bump, things to watch out for. Forewarned is forearmed. Here's one of the spots where economy—specifically applied to the number and quality of men a manufacturer hires for his team—just can't pay off. If Stroppe had had to go to Mexico and leave work undone in Long Beach,

results would really have suffered; but there was a full crew in Long Beach, and preparation continued while he was away.

Actual departure of the truck caravan was delayed a couple of days for truck-wheel balancing, repositioning of spare parts on the compartmented service trucks, and consideration of diet. If this last sounds strange, remember that travel can mean distressing, though minor, upsets to the best of us; taking chances that a driver or even a key pit crew man will come down with the collywobles is just not playing it smart. So dozens of huge demijohns of pure spring water went on top of the parts truck; an enormous refrigerator had its own gasoline engine, and contained steaks galore (sirloin tips did for stew!). The latest type of canned-but-fresh-tasting milk, not obtainable at retail, was ordered. Candy bars and cigars appeared in gargantuan boxes. (Man cannot live by bread alone.) When the time came to leave, the caravan was entirely self-sufficient with the exception of gasoline and, of course, sleeping space.

A result of these careful plans was that the trip across our own Southwest, and from El Paso down to Mexico City, was definitely on the dull side so far as race-business went. It was a useful breathing space for many of the drivers and crew (but of course hard work for the truck drivers; we live and learn, and no one had better say, "Oh, he's just a truck driver!" to me again).

A few days in Mexico City sufficed for finishing up pre-testing jobs, checking brakes, etc., and one quiet afternoon we departed for Oaxaca, with me sandwiched between Johnny Mantz and Bill Stroppe, in the car which they hoped to bring in first. At first I thought that I had somehow slept over 'til race day by mistake. When you ride with a professional race driver for the first time, it's bound to be a thrill; when it's on a practice try at one of the toughest legs of the Panamericana, yipe!

To begin with, the two superb safety belts and shoulder harnesses, cannily planned to allow free movement when driving, but virtually none in an emergency, were useless because there were three of us in the seat.

Following too close to another car has become a major traffic offense in many states, and with reason: most drivers, certainly including myself, just aren't up to the sudden demands that bumper-riding can make on them. Yet three of the race Lincolns (including Mantz's) covered the 300-odd miles a few feet apart, and with a feeling of security which grew with each bizarre curve. The reason was compounded, in equal parts, of the cars' safety features and the drivers' ability. No driver could have driven a totally unaltered car in such a way and lived to read this; and no car, no matter how good, could have sat so solidly on the road in less expert hands. My ride was anything but comfortable physically (a plugged gas

tank vent and the multitudinous curves combined to make me carsick, for the first time in my life and to the amusement of the drivers), yet before we pulled into Oaxaca (in about six hours, to the astonishment of the motel owner) I was nodding and napping along with Stroppe, though we both sat bolt upright.

Sliding into a corner is one thing, I found, on MT's broad and unobstructed test strips, and quite another on a hairpin curve at 60 mph, with a rocky bank on one side, a hundred-foot cliff on the other, and four bicyclists approaching in the center of the road (all practicing, of course, was done during "normal" conditions—with such hazards as the aforementioned bicycles, burros asleep in the road, and various pedestrians, all of whom seemed to be under four or over 70). The racing tires screamed softly—they didn't sound half so bad as some stock sedans—Mantz

flipped the Hydra down into D-3, and we'd be off again without a lost second, and with, so far as I could see, no loss of control.

Huge chuckholes abounded in short stretches of the road, and though some resulted in a sort of Mantz version of broken-field running, others were so thick that there was nothing to do but plow through them with sheer brute force. I must have made quite a face as we approached the first of these compulsory minefields, for I noticed Johnny grinning at me just before we hit. But instead of it being all over for us, the Lincoln had murmured "dlump" and continued unperturbed. I don't think the hood even dipped. By race time, the crews who were filling in the holes and shoring up rickety bridges will have completed their job, and these hazards will not exist. But the crowd control—probably (Continued on page 62)

CONFIDENTIALLY... (I CAN GET IT FOR YOU WHOLESALE)

MOLY + BRONZE = LONG ENGINE LIFE



LIFETIME BRONZE FILTERS AND MOLY-PAKS team up for maximum engine protection; MOLYbdenum Disulfide in micro clean oil! Porous bronze filters last forever, are 250% more efficient, remove abrasives in the 10-40 micron danger zone, but do not remove detergents like ordinary filters. Moly-Paks offer the most convenient method of getting Moly's proven protection and performance.



① **MOLY + FILTER** **\$7.20**
 ② **FILTER ONLY** **\$6.45**
 ③ **MOLY-PAKS ONLY** **\$1.00**

\$42.85 ①

49-54 Ford
49-54 Chev.

GENUINE CONTINENTAL KIT
1955 FORD, CHEV. \$79.50 ①

52-54 Merc. \$ 89.75	52-53-54 Lincoln ... \$ 89.75
51-53 Buick 99.75	53-54 Plymouth ... 89.75
(Except Special) 99.75	53-54 Dodge 89.75
54 Buick All ... 99.75	54 Cad. 109.75
53-54 Olds 98, 88 ... 99.75	53-54 Pontiac ... 89.75

Chrome Tire Cover Ring optional, add \$15.00. Kits come primed for paint. Specify make, model car and tire size.

\$6.90 ① **PAIR**

FLARE SKIRTS

Nash Rambler, ... 52-54	Pont. 35-54
Sixtyman ... 52-54	Stude ... 35-52
Nash Ambassador ... 35-54	Ply ... 35-54
Ford ... 36-54	Dodge ... 35-52
Willys ... 52-54	DeSoto ... 35-54
Merc ... 39-54	Chrys ... 35-54
Chev ... 36-54	Buick ... 35-41, 50-53
Olds (Elec. 98) ... 35-53	

② **(SUPER DELUXE SKIRTS) ... \$9.95**

The lever locking skirts are steel with concealed rubber liner. Easily installed. The skirts are primed for paint.

\$33.95 ①



EXHAUST HEADER SETS
FORD-MERC. 37-54
CHEV. (EXCEPT CONV.) ... 41-54
AVAILABLE FOR MOST ALL CARS
 Sets include headers, header extensions, mufflers, tail pipe, clamps and brackets.

SUPER SPECIALS

(DISCOUNT CARD HOLDERS TAKE AN ADDITIONAL DISCOUNT #A ON THE BACK OF YOUR CARD)

① **MOON WHEEL DISCS**
Set of 4
\$12.95
13 in. or 16 in.

① **SAUCER WHEEL DISCS**
Set of 4
\$12.95
13, 15 or 16 in.

① **WIRE WHEEL DISC**
Four Genuine Calvear with wheel locks
\$34.95

① **BRONZE OIL FILTER**
\$12.95

① **THIN HEAD GASKETS**
\$4.95

① **DUAL HIDEAWAY REAR AERIALS**
with 15' lead
\$12.50

① **ELECTRIC DOOR KIT**
(Two Doors)
\$14.95

① **ELECTRIC TRUNK AND HOOD KIT**
(Specify)
\$6.75

GOT YOUR DISCOUNT CARD YET?

AUTO DISCOUNT CO.
 1529 - 11 VICTORY BLVD.
 GLENDALE 1, CALIF.
 PRICES F.O.B. GLENDALE - 3% TAX IN CALIF.

NAME _____
 ADDRESS _____
 CITY _____ STATE _____
 CAR MAKE _____ YEAR _____ BODY STYLE _____
 RUSH ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
 ITEM ⑬ ⑭ ⑮ ⑯
 Discount Card # _____
☐ FULL PAYMENT ENCLOSED, OR
☐ 25% INCLUDED, BALANCE C.O.D. **11**

Motor Trend

By Pete Molson

WHAT'S COMING UP?

JANUARY

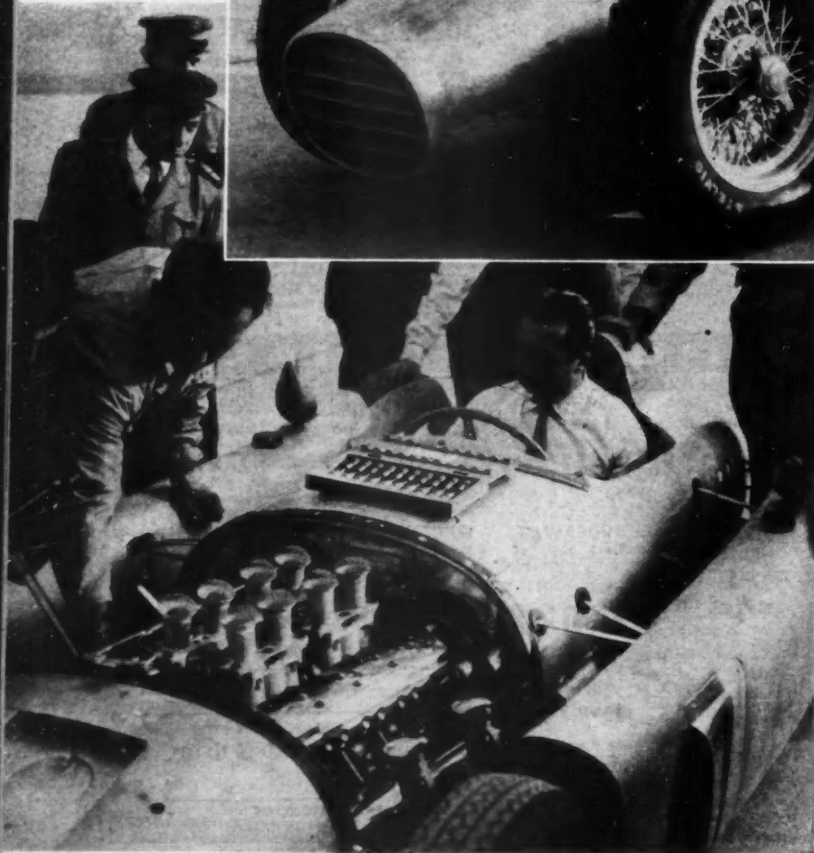
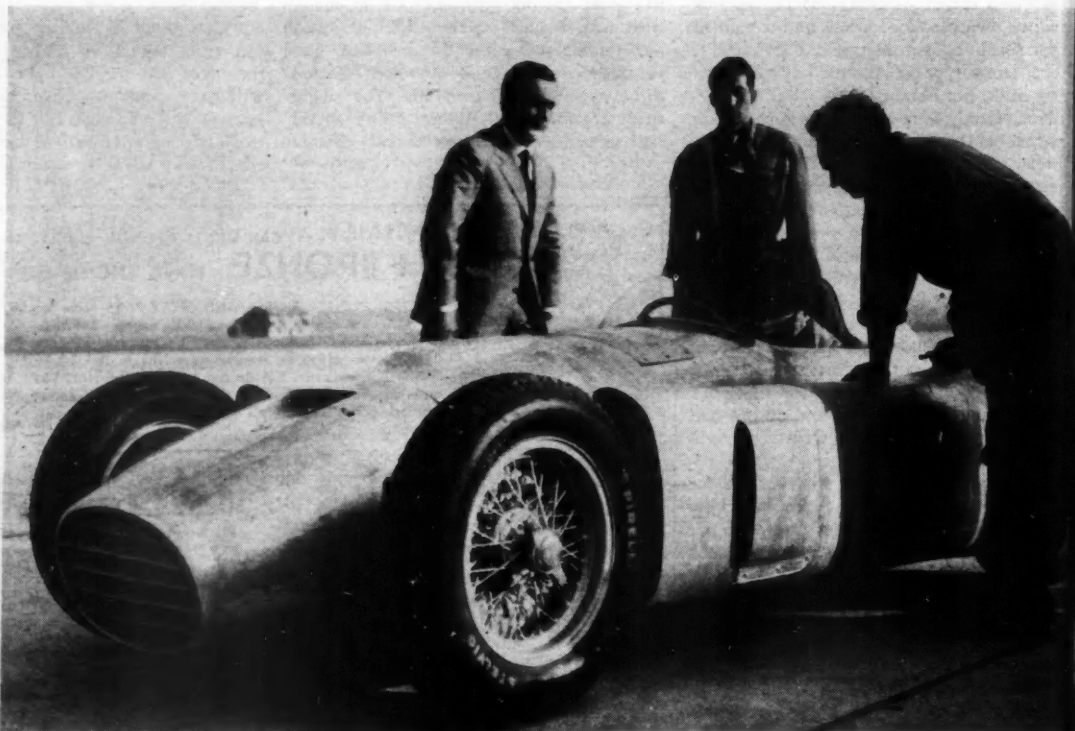
14-27, Sports Cars Internationale,
Henry Ford Museum, Dearborn,
Mich.

15-26, Brussels Show, Brussels, Belgium

FEBRUARY

20-27, Sixth Annual NASCAR Speed
Week, Daytona Beach, Fla.

20-27, Universal Travel & Auto Sports



Alberto Ascari studies the long-awaited Formula 1 Lancia V8, a 260-bhp threat with only 2487 cc (152 cubic inches) displacement, or less than half that of an Olds 88. The car weighs about 1365 pounds and has a de Dion rear axle and transverse springs front and rear. Grand Prix racing should be worth a look in '55



Show, Madison Square Garden, New York, N.Y.

23-27, Fifth Annual National Autorama, Connecticut State Armory, Hartford

Motor Mélange makes every effort to quote correct dates and other information for the national events listed here. We suggest that you check with your local auto club or newspaper before making final plans, since dates and courses may change after MOTOR TREND has gone to press.



The space man about to set out for a day's sport in the Bugatti at left is actually a fairly normal human being wearing a protective mask because of what he will shortly encounter. In Sweden, writes correspondent Svend Aage Nielsen, no one thinks of racing in the summer; presumably they would rather spin out into a snowdrift, or feel the exhilarating breeze on their faces, as the drivers are doing on the inhospitable lake below



Photos by Svend Aage Nielsen

Left, Marshall Teague piloted his Hudson Hornet (which isn't much like its '55 successor) to another AAA National Stock Car Championship. He held same title two years back

sold out on the newsstands . . .

but still available for a limited time are these popular Trend Books. You can make certain you get your copy by mailing your order today. Any one or all of these popular books will be an invaluable addition to your home library, serving as a ready reference guide for any automotive question.



order today!

Use the handy coupon below to order your copies before it's too late! All orders are filled promptly and sent direct to your door in a durable, protective mailing envelope.

- ☐ #107 "DREAM CARS"
World's most unusual cars; past, present, future.
- ☐ #105 "RESTYLE YOUR CAR"
Custom techniques, materials in full detail.
- ☐ #103 "HOW TO BUY A CAR"
New or used; a valuable illustrated guide.
- ☐ #104 "SPEED & SPORT"
History, events; the complete sports car story.

TREND BOOKS
5859 Hollywood Blvd., Los Angeles 28, Calif.

Enclosed is \$..... for the books checked above at 85c each, postpaid. \$1 each for residents of Canada.

name.....

address.....

city.....zone.....state.....

With the Lincolns in Mexico

(Continued from page 59) better here than on any comparable race in the world, if there were any comparable one, that is—can never do a perfect job, and time spent now in dodging cows and such always pays off in sharpened alertness. The only thing to dodge may be another car, but I don't need to tell you that that calls for pretty good judgment, too.

As for straightaways, they were few and short south of Mexico City. Chuck Daigh had thoroughly covered the area north to the border, more or less playing tag with our lumbering truck caravan. When Johnny got No. 104 up to an indicated 90 on its more-than-usually-accurate speedometer, it was nothing at all (at least to me; I guess I was blasé at that point). And of course, the last few hours' practice were run in the dark, a circumstance which slowed down Mantz not at all.

So it was a strange ride; their experiences on it were evidently unsatisfying to all the drivers, though this seemed incredible to me with such perfect-handling cars. On the morning after we arrived at Oaxaca, the crew had virtually torn all the cars to bits and laid them out on the grass. Suspension was the chief beef, and to improve it, shocks, springs, tires, and wheels were discarded and replaced. Of course, 300 miles of that kind of driving can cause a lot of wear, and there's no point in starting a race—or even another practice leg, which the Oaxaca-Tuxtla dash southward would be—with equipment that's not up to snuff.

And that—though it took me two very

full weeks just to watch it—was a minute fraction of all the work done to get Lincoln in winning shape. The men, key to satisfactory preparation, all have so much experience either in driving or as mechanics, or both, that it's staggering. Many come from the aircraft industry, whose standards of accuracy are second to none. All are perfectionists, without the neurotic overtones that sometimes accompany this attitude; to them, perfectionism means something very simple: if the job isn't perfect, they just keep at it until it is. That's why they had a better chance to win than anyone else.

So that's how they got ready. Now we'll see how they do on the 23rd.

Pete

MEMO from Pete Molson

11/23/54

To: Walt Woron

Looks like we guessed right, at least in part. It's true that Ray Crawford wasn't officially a part of the factory team, but it's just as true that Stroppe and Smith prepared his Lincoln in the same way they did the others. With a time of 20 hours, 40 minutes, 19 seconds, he was a minute and 48 seconds ahead of Walt Faulkner, who in turn led Keith Andrews' Cadillac by just a minute and seven seconds.

Ferrari took the big sports cars (Maggioli, Phil Hill, and Chinetti in that order); Porsches driven by Hermann and Juhan led Chirno's Osca in the small sports; and Dodges swept the small stocks (drivers were Tommy Drisdale, C. D. Evans, and Ray Elliot). And that does it for this year.

—Pete Molson

Classic Comments

By Robert J. Gottlieb

QUESTION—I have located a 1931 Marmon 16-cylinder coupe with rumble seat, which I really want. I have also located a spare parts coupe. I can get both of these cars for \$300. Does this seem a reasonable figure? Shall I mill the heads for better performance?

F. C. Padgett
Mineola, Tex.

ANSWER—Grab them; they are well worth the money. The Marmon 16 is a fine example of a classic, even though its body is closed. I advise against modifying the car by milling the heads. Properly restored, this car will get up and go and really surprise you.

QUESTION—How many Bugattis were built? Which was the fastest model for street use? Can you tell me how many are in existence today?

Jay Carbone
New York, N. Y.

ANSWER—Approximately 9000 were built. The type 35, built for street use, was good for 125 mph when super-tuned. There is no way of estimating the number still in existence.

QUESTION—My pride and joy is a 1929 Chrysler convertible coupe with a body by Locke. Would I spoil it by having the upholstery done in plastic instead of the original genuine leather? Is this a rare car? Is it a classic?

Paul S. Cutter
Collingswood, N.J.

ANSWER—Your car is rare and it is a classic. If you can possibly afford to do so, reupholster it in genuine leather. It would be a shame to spoil so rare a car by installing plastic. Why not use seat covers until you can afford leather? Many collectors do this.

(Cont. nued on page 74)

NOW! A New Metal Filter Cartridge That Lasts Forever...

Makes ALL Other Filters **OBSOLETE!**



- ✓Positively ENDS Costly Cartridge Replacement!
- ✓Assures TOTAL FILTRATION...Ends "Hidden Grinding"!

IMPROVED-LIFETIME

Perma Bronze Filter Cartridge

MILLIONS OF TINY BRONZE BALLS...
filter-out abrasives as small as 39
millionths of an inch, without removing
factory-compounded detergents!

NOW!

1 SIZE...1 PRICE
for most cars!

Only **\$6.95** ppd.

(Fits present filter case)
Complete Filter Unit including
case and brackets (for cars
with no stock filter)...\$12.95
Full-Flow" Element)...\$11.95.
Required for these cars:
Buick V-8; Olds V-8; '52-
'55 Ford V-8; '54-'55 Ford
V-8 and Mercury; '52-'55
Lincoln; '46-'55 Chrysler.

**YOU CAN INSTALL
IT IN 5 MINUTES!**
Easier to install than
ordinary filter packs,
instructions included.

WHY IMPROVED-LIFETIME MAKES OTHER FILTERS OBSOLETE—

Ordinary Packs are Inefficient Because:
THEY REMOVE DETERGENTS.
New cotton, paper, etc., packs do
remove most abrasives...but they
also soak up factory-compounded
oil detergents.



**THEY "LOAD-UP," PERMIT
"TUNNELING."** Pack soon be-
comes loaded with detergents,
abrasives. Oil pressure then forces
"channels" through pack, piping
unfiltered oil back into engine.

THEY REQUIRE REPLACEMENT every 3 to 5 thousand miles.

WHY IMPROVED-LIFETIME SAVES MONEY—

1. The first cost is the final cost...no more oil filter cartridges to buy.
2. Fused bronze wall has uniform porosity, filters efficiently—all the time—year after year!
3. An occasional quick, easy rinsing in gasoline or kerosene renews it...like putting in a brand new filter each time—but without the cost!
4. Leaves all the valuable and expensive additives in your oil...where they can continue their job of controlling carbon, varnish and sludge.
5. IMPROVED-LIFETIME eliminates major causes of wear and repair...you can expect almost twice the service before an engine overhaul.

STOP engine-punishing abrasive action! End FOREVER the bother and expense of frequent filter pack replacement. This IMPROVED-LIFETIME Cartridge provides the "miracle" filtering action of porous bronze. New cylindrical design assures maximum filtering area and structural strength! Filters by "screening"...can't clog or "load-up" like ordinary filters. Made of non-absorbent metal, it can't soak out valuable detergents. Oil remains "refinery clean"—lasts thousands of miles longer! Benefit NOW from this great new filtering achievement!

HOW TOTAL FILTRATION PROTECTS YOUR ENGINE—

- Removes harmful abrasive particles. Ends "hidden grinding"...the gnawing away of cylinder walls and metal parts by abrasive laden oil.
- Difference in water-oil surface tensions strip-out acid forming moisture.
- Designed for jet aircraft—filters oil 100% efficiently at all temperatures. Ends "cold starting" wear.

DON'T BE CONFUSED BY EARLY TYPE BRONZE FILTERS STILL ON THE MARKET—

They filter, yes. But why buy an outdated filter when the IMPROVED-LIFETIME costs no more? This new cylindrical filter has these important improvements:

1. Average 40% more filtering area.
2. Self-sealing on center post. No critical gasket problems to cause installation difficulties.
3. Withstands 93% more actual pounds of oil pressure, reports unbiased Testing Laboratory*.

*Photo-copy of actual test report will be mailed to you without charge, upon request.

DEALERS! JOBBERS! Help us fill the demand! The IMPROVED-LIFETIME (Pats. Pending) is the *only* metal filter element that comes in one Model for most popular cars, instead of 20 to 30. Write today!

CLIP AND MAIL COUPON TODAY!

DOUBLE YOUR MONEY BACK • GUARANTEE •

The IMPROVED-LIFETIME is fully guaranteed for 10 years—will actually never wear out! In addition, we guarantee **DOUBLE YOUR MONEY BACK** if the Cylindrical Element develops any structural weakness.

ORDER NOW—
SENSATIONAL 30 DAY
FREE TRIAL! Try, test,
compare this amazing
filter for a full month.
Then, if you're not
100% convinced it's
everything we say,
just send it back for
prompt, full refund!

ENGINE PRODUCTS MFG. CO.
5801 E. Beverly Blvd., Dept. 254
Los Angeles 22, California
☐ RUSH IMPROVED-LIFE-
TIME Filter Element at \$6.95
☐ Rush Complete Filter Unit
(Incl. Case) at \$12.95
☐ Rush "Full-Flow" Type Filter
Element at \$11.95
☐ Enclosed is \$
full price, ship fully postpaid.
☐ Enclosed is \$2.00 Deposit—
ship C.O.D., plus postage.

GENTLEMEN: Please send me filter(s)
checked at left. I understand that if I am not
completely satisfied I may return for full re-
fund within 30 days.

CAR YEAR _____ MAKE _____ MODEL _____
NAME _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____

persistent hoarseness or cough

...is one of the seven commonest danger signals that may mean cancer...but should always mean a visit to your doctor.

The other six danger signals are—Any sore that does not heal...A lump or thickening in the breast or elsewhere...Unusual bleeding or discharge...Any change in a wart or mole...Persistent indigestion or difficulty in swallowing...Any change in normal bowel habits.

For other facts about cancer that may some day save your life, phone the American Cancer Society office nearest you, or write to "Cancer"—in care of your local Post Office.

American Cancer Society

CANADIANS



FREE CATALOGUE

The latest racing equipment catalogue is now available to you. Learn the latest in the automotive field. Send 50c for the catalogue and it will be refunded to you as credit on the first order you place.

CAL-VAN ACCESSORIES LTD.
546 Kingsway, Vancouver 10, B.C.

NOW! USE YOUR WILLYS OR DODGE AS BOTH A 2 and 4 WHEEL DRIVE



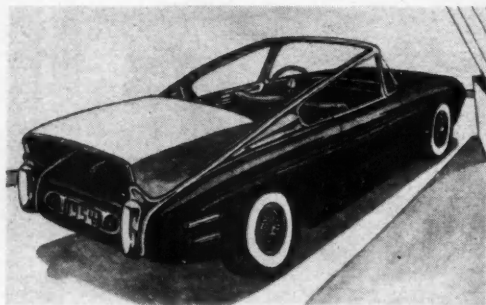
Enjoy 2-wheel drive pep, speed, extra mileage, performance and keep 4-wheel drive, power and traction with WARN HUBS. Change 4-wheel to 2-wheel or back in seconds with fingertip control. Front end assembly stands still in 2-wheel drive—ends drag, stops shimmy, cuts front tire wear. Increases gas mileage. Willys factory approved. For Willys \$70.00; Willys Automotive \$122.83 pr.—both sold exclusively by Willys dealers everywhere. Dodge Locking Hub \$74.00, Standard Hub \$23.00 pr., ppd. direct or at Dodge dealers. All hubs guaranteed. Write for literature, WARN MFG. CO., Riverton Box 6864-TD, Seattle 88, Wash.

What's Your Idea?

A two-year subscription to MOTOR TREND (or a two-year extension to your present subscription) is yours if we pick your idea for this column. Send it to "What's Your Idea?" Editor. Sorry, we can't return submitted material.

I HAVE never had an art lesson, but one ambition is to be an automotive designer or stylist. In drawing projected designs, I've come up with several ideas which I think are unique; here's one I'm passing along to other MT readers. It's a true hardtop convertible that employs two rails extending the length of the car. The top slides back on the rails, and rests against "bumpers" at the fender tips. Although I've styled the car shown in a present-day manner (to show how the top could be applied to existing design), I can foresee novel rear-end treatment to blend with this

or any other style of sliding top. In proposing this design, I must confess that I hope its appearance in MT will spur some customizer to build such a top. Murray Craddock, Brantford, Ont., Canada.



HERE'S an idea which I hope will become more than just that—for I have a patent pending on the device and hope someday to have it on the market. The bumper guard pictured here is made entirely of rubber with a one-half-inch

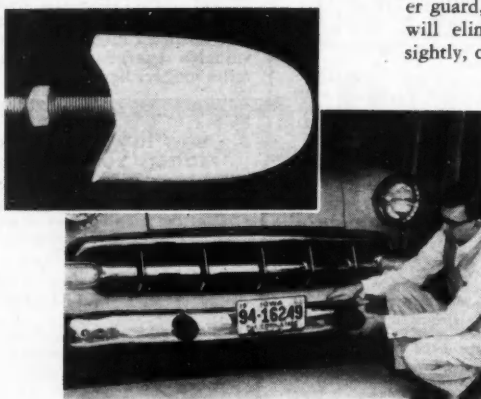
costly) sharp creases and dents resulting from metal-to-metal contact. Other attributes are the ease of installation, and low-cost replacement (compared to a chromed bumper guard) should a guard be cut badly or broken. Another factor favoring this idea is that the rubber bumper guard, not fitted with a metallic surface, will eliminate annoying rattles and unsightly, crooked installation; the back face

is made of softer rubber than the guard's contact surfaces. Thus, when the attaching nut is tightened, the rubber guard is drawn to a snug, straight fit against the bumper.

Slight-but-needless damage caused in a minor accident served as the impetus in my project. I realized that our cars weren't equipped with protective devices to foil these accidents, and I decided then and there that there had to be some

way to cushion a car against everyday, slight impacts that can mar its beauty.

Perhaps I can't call this a truly original idea, for service station trucks use the same principle with old tire casings fastened to their front bumpers; but I think I have an idea with a future. Did you see the recent Detroit-bred show car with the rubber-tipped bumper guards? This, to me, looks very promising for my idea. I'll be anxious to hear any forthcoming comments and criticisms from MT readers on my rubber bumper guard invention. Bob Johnson, Fort Dodge, Iowa.



bolt imbedded in the rubber to connect the guard to the bumper through the holes already drilled for the original guard. The bumper guard is about six inches long and about four inches in diameter. The back portion is shaped to the bumper contour.

Why a rubber bumper guard? First, it will eliminate scratches caused by low-speed, parking-type bumps; second, where body damage is more serious, the rubber bumper guards will cut repair costs, for they will make a round, curved dent in the metal, rather than the usual (and

Sell 'N' Swap

Requirements are: copy limit of 25 words (not including name and address), first come, first served; we reserve the right to edit where necessary; we are not responsible for accuracy of description, although we will reject any misleading statements. This service is not open to commercial advertisers. No ad will be accepted if payment is not made in advance and such communications will not be acknowledged. Only one CAR may be listed in any single Sell 'N' Swap insertion. This limitation will not apply to parts, catalogs, etc. The charge is four dollars per insertion. If your car is unusual and you have a photo of it suitable for publication, you may submit it with your ad. If we decide to print it there's no cost to you for the cut, but we'll have to decide which photos to use. Sorry, no photos can be returned.—Editor

SELL

'33 LINCOLN KA, 7-pass. limousine. Body by Murray; vacuum booster brakes; fair condition, easily restored; \$500 or best offer. Norman E. Saville, 3416 Collee, Alton, Ill.

'49 TRIUMPH 1800 conv., \$1900 conversion to 276-inch V-8 Stude, overdrive, power brakes, chromed crank, quadri-jet carburetor, right-hand drive. \$2250. S. D. Biren, 9563 West Pico Blvd., Los Angeles 35. Phone CR. 1-6128.

'30 DUESENBERG J Murphy 4-dr. conv.; engine overhauled, body in good shape; dale for '29 London premiere show car. Best offer over \$1500. D. W. Conner, 2114 Glenwood, Fort Wayne, Ind.

'40 LASALLE 4-dr. sedan, radio, heater, 38,000 actual miles; good tires, clean, fine grey body; excellent mechanical condition; motor just rebuilt. \$225. Johnny Nill, 1121 E. Forest, Wheaton, Ill.

FORD T PARTS available. Wide range many type parts at reasonable prices. Large listing sent free. Also, many mechanical parts for other older cars. E. Hemmings, 1036 Hampshire, Quincy, Ill.

'41 PACKARD Custom 180, 4-dr., 6-pass., interior, body, chrome, w.w., excellent, very good running condition; 47,000 actual miles. \$500 or best offer. James J. Dougherty, 1747 N. Starr Rd., Columbus 12, Ohio.

'54 DKW Auto-Union, 3-cyl. 2-cycle; 85 mph, 40 mpg; heater, radio (short wave); red and grey leatherette uph. Best offer over \$1800. Walter J. Piper, 1121 E. Houghton Ave., Houghton, Mich.

'32 CHEVROLET roadster; excellent condition; engine runs good; original paint; free of dents and rust spots, stored 10 years. Best offer within 30 days takes. Howard DeWitt Jr., Hay Springs, Neb.

'24 FORD T roadster, excellent condition, new top, new paint, new uph.; tires like new. Complete motor overhaul, driven only in 1954 N.C. tour. \$650. Bob McCall, 711 Quaker Lane, High Point, N.C.

1921 FORD T touring; excellent condition, new top, new paint, new uph., tires like new. Complete motor overhaul. Driven very little. \$600. Bob McCall, 711 Quaker Lane, High Point, N.C.

'46 LINCOLN CONTINENTAL cabriolet; I think without reservation, the finest in the land. Thoroughly conditioned by Lincoln; black, white Nylon top, new 12 engine. \$2750. V. A. Meier, 1161 Bishop Rd., Grosse Pointe Park 30, Mich.

1920 FORD touring car restored to near original condition. New tires, top, uph., plus an overhauled engine, 2 spare engines, 1 spare chassis included. \$700. Tom Brackett, 702 Fairmount, St. Paul, Minn.

1913 BUICK touring; 90% restored. New top & uph., painted white with lots of brass. Has acetylene starter. \$2000. C. D. Moore, 707 S. Main St., Normal, Ill.

'48 JAGUAR Mark IV convertible. Superlative condition. Wire wheels, wheel discs, large chromium

Install white side walls on your present black tires. Not a paint but real live 100% cured rubber that actually becomes part of your present tires. Installation is as easy as patching a tire. Gives any tire the mid-century look. Everything is furnished in one complete kit. Send today! 50% dep. with all COD's.

white side walls \$9.95

Guaranteed not to turn yellow or discolor with age.

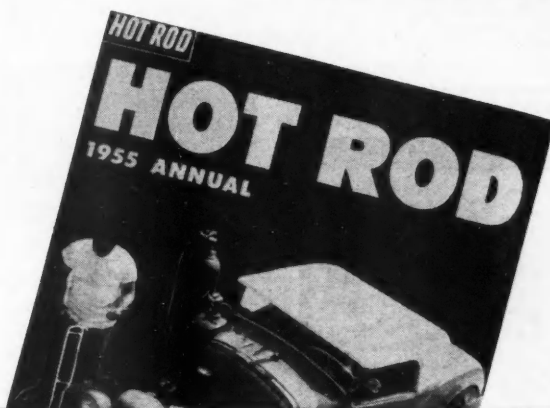
(for 4 tire kit)
5 tire kit only \$11.95

Dealer, jobber and distributor inquiries invited. Sold nationally. Write today.

Seyco Products Corp., Dept. MT, 3298-A Calvert Ave., Detroit 6, Mich.



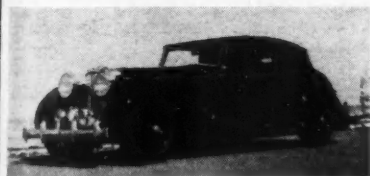
The world's finest book on the world's fastest sport...



Compiled by the Editors of Hot Rod and Car Craft Magazines

START THE NEW YEAR with this valuable book in your library! A valuable reference guide to all the latest ideas in America's fastest sport. 144 expertly written pages will give you ready knowledge of chassis designing and rebuilding, engine conversions and the best in rear-engine hot rods. You'll be able to see, with the help of over 300 photos, just how to do jobs on your own car; how to develop safety features that should be a must in every car. A complete section on all the 1954 dragster and lake records will give you factual information that goes to make up the exciting history of this fabulous American sport.

on sale Everywhere!



headlamps. Last of classic Jaguars. 34,000 miles. 3-position top. \$1500. A. Pries, 4161 Barry, Chicago, Ill.

'28 ESSEX Super 6 coach; engine, body in very good condition; five good tires, good brakes. Some spare parts. \$300. M. A. Mead, 178 N. Taylor Ave., Oak Park, Ill.

'35 DE SOTO Airflow 4-dr. sedan in excellent condition with overdrive. Good-looking; runs well. Submit offer to D. Miller, 13995 Davenport St., Pacoima, Calif.

'37 CHRYSLER Airflow 4-dr. sedan in excellent condition; with overdrive. Submit offer to D. Miller, 13995 Davenport St., Pacoima, Calif.

January 1955

RACING EQUIPMENT

BELL Auto Parts Inc.
3633 Gage Ave.
Bell 41, Calif.
Since 1923

WELD
BRAZE
CUT
SOLDER

4 WAY
ONLY
\$14.75
factory
WELDER

Complete with
Twin Carbon Arc
Torch and ac-
cessories... 10
handle all metal-
craft work.

Acclaimed by thousands of
stock, hot rod and customizing en-
thusiasts as the welder of 1001 uses.
Easily operated from properly wired
110 volt AC or DC line. The ideal
gift with a life-long use... Order
today on 10 day money back guarantee.

Literature on larger equipment on request

FOUR-WAY WELDER COMPANY

1010 S. Federal St., Chicago 16, Ill., Dept. F-27-A

NEW
SUPRISE
WHOLESALE
CATALOGUE
SEND 25¢ NOW

FREE
WHOLESALE CATALOG

CHALLENGE
SPEED SHOP
T-3086

FINISH HIGH SCHOOL AT HOME!

No classes to attend. Easy spare-time training covers big choice of subjects. Friendly instructors; standard texts. Full credit for previous schooling. Diploma awarded. Write now for FREE catalog!

WAYNE SCHOOL Catalog HCE-3
2527 Sheffield Ave., Chicago 14, Illinois

Drive a MORGAN-STUDEBAKER
and out nobody's dust...

CHAMPION SIX OR 12

BOAST new rugged power, better economy, flashing get-away. Get parts list, pics, hop-up info, tune-up tips all for 50¢ with Double-Your-Money Certificate worth \$1 on buys. Tell whether for V-8 or Champion. Write **FRANK MORGAN CO.** Dept. BL-1, MARYSVILLE, CALIFORNIA

Have Your Car Painted With
DUCO LACQUER \$47.50

A new mechanical process for refinishing automobiles (exclusive with us) reduces costs to the price of enamel. We also do the finest metal work, restyling, filling and collision repairing.

Larry & Luckey CUSTOMIZING
4300 Sunset Blvd. Los Angeles 29, Calif.
Tel. NO. 2-7262

Send 25¢

POWER PRODUCTS
FOR ALL
POPULAR AUTOMOBILES

Giffenhaus
5054 ALHAMBRA AVENUE
DEPT. T-4 LOS ANGELES 32, CALIF.

SELL continued

'53 JAGUAR convertible: 13,600 miles, fully modified; radio, heater, wire wheels, excellent condition, never wrecked or raced. \$3250 cash. Dr. William Durbeck, 821-824 Medical Arts Bldg., San Antonio, Texas.

'48 LINCOLN CONTINENTAL hardtop in excellent condition. 66,000 actual miles, new jet black finish, four new white tires. W. D. Hart, Box 840, Lynchburg, Va.

'40 PACKARD 1804 sedan, sidemounts, 6 good tires, in daily service, ideal for restoration, excellent running condition. Needs paint only. \$150. Consider trade. Jim Jones, 2046 73rd Court, Elmwood Park, Ill. Gladstone 3-6190.

'36 LINCOLN KV-12 7-pass. cabriolet Limousine. Coach work by Brun; black original paint. Russian cowhide top, side mount, disc wheels, good tires. \$2150. Edward F. Vinding, 54 Upland Dr., Port Chester, N.Y.

'37 CORD Berline Special original; excellent condition; new tires, chrome and paint. \$1200. Lt. Max McHenry, 10373 Ann Arbor Ave., Cupertino, Calif.

'38 MERCEDES-BENZ Model 230, 4-dr. sedan, 6 cyl., swing axles, r. & h. Complete overhaul and new tires recently. Distinctive, sporty, practical. \$1000. W. E. Deeds, Dept. of Physics, Univ. of Tenn., Knoxville, Tenn.

MODEL T FORDS and numerous T parts. Send \$1 for catalog and prices. Join in the fun of restoring an old car today. W. Larson, Box 581, Williamsport, Pa.

USED '54 LINCOLN PARTS: one Holly 4 venturi carburetor with auto-choke and air cleaner. \$35. One distributor, \$7.50. Terms C.O.D. plus parcel postage. R. Hanson, Jr., 1304 Rubio St., Altadena, Calif.

'36 CHRYSLER Airflow 4-dr., model C-9, 8 cyl., radio, heater, overdrive, power brakes, near-new



tires, service manual, excellent condition; true classic, \$650. Ronald A. Jones Jr., Box 244, Men's Residence "X," West Lafayette, Ind.

'53 DUSENBERG convertible roadster #370. Former owner, Mae West. \$2000. 1776 Sunset Plaza Drive, Los Angeles, Calif.

'53 ALVIS, classic drophead coupe, 14,000 miles. 104 hp, 6 cyl., twin overhead camshaft engine, 103 mph. Cost \$4600; sacrifice \$1900. Dr. Kasday, 5504 Hollywood Blvd., Los Angeles 28, Calif.

TRANSMISSION, JAGUAR MK5, 4-sp. box, flywheel, starter, bell housing. Only 11,000 miles. \$150. G. T. White, 2010 47th Ave., San Francisco 16, Calif. SE 1-6777

'25-'27 RED LABEL LE MANS BENTLEY 3-liter. Most outstanding model believed to be available. Entire car in excellent condition. \$2000. Trade or best offer. Particulars on request. Dante Ruggiero, 135 Prospect Park, SW, Brooklyn, N.Y.

'33 CADILLAC 4-dr. convertible, ohv 12-cyl., dark green, actual 40,000 miles, wire wheels, original, new top, unbelievably excellent. Have asked \$2000. Make offer. W. K. Haverstick, 346 N. Boyle Ave., St. Louis, Mo.

'52 JAGUAR MARK VII, 22,000 miles, excellent mechanically; engine rebuilt by Import Motors; cost \$700. New clutch. Sacrifice, must sell \$1800 or best offer. Nelson Ring Jr., 7101 Pine Island Dr., Rt. #2, Comstock Pk., Mich.

'37 PACKARD Super 8 Dietrich conv. Victoria. Run 50 miles per day until one year ago. Completely restorable. Too nice to junk. John Hall, 421 Second St., Dunellen, N.J.

'36 LINCOLN ZEPHYR, 4-dr. V-12; sound body; in daily use. Needs rings, valves, upholstery work. Twin to car on bottom page 31, Feb. '54 MT. Best offer. M. C. Fuller, West Hiway #30, Rt. #1, Grand Island, Neb.

'53 CAD-ALLARD K-3, excellent condition, driven for pleasure one season, owner leaving for Alaska. Cost with extras \$5240. Sell for \$4200. Phone Palm Springs 8-3781. Wm. Wallace, Box 457, Cathedral City, Calif.

HUB CAPS. Threaded type, approx. 450, mostly fine used, some new, wide variety, plus antique 2-shell corner show case. All for \$198 f.o.b. W. Safford, 316 S. Union St., Burlington, Vt.

'39 PACKARD V-12 Limousine; original finish & uph. in excellent condition. Sidemounts. Engine, excellent condition. Chauffeur driven to Sept. '54. Will trade. K. N. Montgomery, 4534 Chestnut St., Philadelphia, Pa.

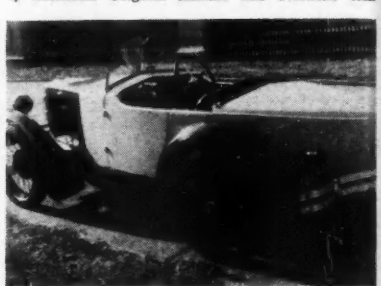
'52 FORDILLAC convertible, '53 just rebuilt 3/4 race Cadillac with new Olds Hydra-Matic; heavy duty springs and shocks. Firestone Supreme tubeless tires. Fabulous acceleration. \$3300. Jessop Smith, Old Mill Rd., Gates Mills, Ohio.

'48 LINCOLN CONTINENTAL convertible, '53 Cad. engine, overdrive. Sound but a little shabby. This car needs a new loving owner. \$1500. Al Leppert, 2820 Main St., Ocean Park, Calif.

'40 DELAHAYE conv. type 135 MS r.h. drive, 4-speed transmission, interior reuph., engine overhauled 10,000 miles ago; aluminum body needs paint. \$1250 firm. Peter Gogola, 475 W. Barrett, Royal Oak, Mich. LI. 6-5270.

'51 FORDILLAC, 2-dr. sedan, excellent condition, fully equipped. New whitewalls and overdrive. Sell for \$1500 or trade for late model Cadillac. John Ehlick, 114-30 197th St., Albans, N.Y. HO. 8-9822. CLASSIC CAR SALES CATALOGS: Packard, Chrysler, Lincoln, Cadillac, Pierce-Arrow, orphan and foreign cars; minimum \$5 each. Also Motor (N.Y.). Annual numbers. Details for large stamped addressed envelope. A. E. Towhry, 400 N. Kenmore, Los Angeles.

'30 MG two seater, beautifully restored, mechanical ly excellent. Original manual and overhead cam-



shaft 4-cyl. engine. Collector's item. Pictures, \$1. Price \$1000. Russ Sanders, 3358 College Ave., Indianapolis, Ind.

ALL-CLASSIC BOOKLET: 32 pages, 70 excellent pictures of custom-built Franklin classics. Original confidential record of transcontinental road test of the Franklin V-12, \$1. H. H. Franklin Club, Oracle, Ariz.

'52 FERRARI 4.1—America, Vignale convertible coupe, 7,000 miles; never raced or abused; excellent condition; \$7000. Charles Bricker, 2035 Hilton Rd., Ferndale 20, Mich.

'37 PACKARD 12 engine completely rebuilt; re-bored; valves, seats ground correctly; precise, ready to assemble. Also excellent Dietrich '37 Victoria 8 body, \$600. Engine alone \$500. Evenings: Hugh Morgan, 5715 Comerford Ave., Los Angeles. HO. 3-9874.

'29 BUICK Model 40; 4-dr. sedan, excellent tires, paint original; mechanical condition, uph., excellent. Must sell, no storage. Sacrifice, \$150. F. Overbaugh, Athens Road, Catskill, N.Y.

'54 VOLKSWAGEN: Like new, 9000 miles. Custom seat covers and foam rubber seats. Also radio, heater, and defrosters. J. D. Koss, 215 Oak Hill Drive, Green Bay, Wis.

'26 BUICK 2-dr. sedan, original paint, needs two tires & battery, excellent mechanical condition. \$350 or best offer. R. H. LaRocque, Glasco, Kan.

'34 FORD roadster, new fenders, white top, Red & eggshell pleated & rolled Naugahyde interior, and black lacquer paint; 3/4 race engine, \$1150. William Miller, P.O. Box 647, Charleston 23, W. Va.

'36 HORCH convertible, straight 8 overhead sodium-filled valves, #4460, automatic lubrication, speed, 160 kilometers. Mike Walsh, 221 Richton, Highland Park, Mich. TO. 5-0449.

WIRE WHEELS for Jaguar; five 16-in. Robergel wheels, chrome individual spokes. Slightly corroded. Original cost \$200. Best offer over \$75. Neil McDade, P.O. Box 831, Chattanooga, Tenn.

'38 JAGUAR SS 100 3 1/2-liter, exceptional engine, body. Picture 10c. Offers over \$2000 or trades.



P. O'Loughlin, 1650 W. Ridgewood Lane, Glenview, Ill.

'47 LINCOLN Continental hardtop. Beautifully preserved black finish with immaculate interior. New whitewalls. Outstanding condition. Trade or offer nearest \$1975. R. E. Burt, 1720 Bates Ave., Springfield, Ill. Ph. 2-7942.

'31 CADILLAC V8, 4-dr. sedan, 6 wire wheels, metal trunk, very good paint-chrome-body. Rust good. \$100. R. S. LeForge, 1125 Divisadero St., Fresno, Calif.

'36 CORD 810 phaeton: 90 per cent restored, all factory engine, transmission, clutch, mechanical parts; completely rechromed; new lacquer. Will wait completion for buyer. Approx. \$2000. Vincent D. Cassone, Seaview Ave., Stanford, Conn.

'37 CORD 812S sedan; no supercharger; engine newly overhauled, transmission fine. Good supply of spare parts. \$595. A good running car. Lowell Sisson, Rt. 1, Box 568, Warwick, Va.

drive, over- needs, arre, ition, Sell John 1922, kard, rphaa Motor mped Ken- nical- cam-

'54 AUSTIN-HEALEY (New in May). 9000 miles, r & h, light blue, modifications to heater, vents, weather-proofing adds more comfort than when new. \$2550. R. Goldich, 6044 N. Avondale, Chicago, Ill. Rodney 3-4260.

'33 FRANKLIN, 4-dr., trunk and luggage carrier, side mounts, 6 wire wheels, run anywhere; good and solid. Pictures 25c. Make offer. Earl Adams, 1458 Ratliff, Richmond, Ind.

'48 LINCOLN CONTINENTAL hardtop; less than 1000 miles since restoration; overall excellent condition. Overdrive, radio, heater. \$2900. A. P. Kephart, Blowing Rock, N.C.

'49 CROSLEY ENGINE; factory rebuilt, cast iron block, complete with starter, generator, clutch, transmission; ready to run. \$125 f.o.b. Wohlers, 355 Verona Way, Paramus, N.J.

'35 PACKARD sport convertible, custom Dietrich body, restored. New top, uph., paint, tires, etc. Drive anywhere; classic beauty. \$975 or best offer. Peter Tillou, 72 West Winter St., Delaware, Ohio. Phone: 3-5721.

'53 PORSCHE 1500 Super Coupe type 356, 23,000 miles; mechanically excellent; good finish, good rubber; one owner, no competition. \$2400 cash. S. H. Jacobs, 8950 Given Rd., Cincinnati, Ohio.

'48 CONTINENTAL hardtop, original black. Double Eagle whitewalls. Lifeguard tubes. recent factory V-12, original uph.; one of the cleanest '54 Watkins Glen Concourse D'Elegance. \$2200. W. Wood, 10 Manhattan Rd., Worcester, Mass.

'37 FORD deluxe 4-dr. sedan, excellent condition; original tires, 9000 actual miles; \$810 pias \$1; highest offer or trade for best custom or classic car. R. Polli, 30 Selye Terrace, Rochester, N.Y.

'14 FORD touring, fully restored, new seats, top, paint, tires, rings, mahogany dash; first prize CCA meet June 6, '54; 3rd prize Michigan tour. \$1250. S. Cal'darelli, North Bessemer, Pa.

'32 FORD roadster, dropped axle, Cadillac, channeled body, custom fenders, full hood, hydraulics, Seward-Warner instruments, parts cost \$1500; best offer. O. H. Ryerson, 2196 Yorkshire Rd., Columbus 21, Ohio.

'54 JAGUAR roadster right front quarter of body; perfect fender and more than half of cowl, including door hinges, white paint. Robert H. Clift, 279 Scott Lake Rd., Pontiac, Mich.

'27 MARMON 8, 5-pass. sedan, side mounts, 4 coats black paint, white striping & wheels, new chrome, top, no lead or rust, drive anywhere, need space. \$450. H. J. Black, 1580 Cardiff Rd., Columbus, Ohio.

'36 PACKARD 12 Dietrich convertible sedan; only 48 made; exceptional appearance, rear windshield, side mounts. All original equipment; used daily. \$400 or best offer. HO. 7-0027, 1818 El Cerrito, Hollywood, Calif.

'31 MAYBACH conv. phaeton, 6 cyl., 120 hp, new tires, new red leather uph., new paint, excellent 3-ply top; runs good, a rare car. Ben Shandrow, 9604 Sa's Rd., Tacoma, Wash. LA. 5174.

'21 VICTORIA BUICK coupe, with Mother-in-law seat, Big 6 engine in immaculate showroom condition; have original car manual and history; reasonable offers accepted. Paul L. Betourne, 899 Washington Ave., Kankakee, Ill. Phone: 3-71-33 or 2-2402.

'22 MODEL T, 1-ton dump truck, self-starter, new paint, cushions, battery, timer, fanbelt and back curtain. \$350 or best offer. Paul L. Betourne, 899 S. Washington Ave., Kankakee, Ill. Phone: 3-71-33 or 2-2402.

'40 FORD conv., customized: '46 Merc block, special from bearings to manifold; electric doors, gold color; Diego axle; mechanical marvel; \$1000. Terms available. Mrs. Evelyn Moser. Phone: MA. 6-9364, Los Angeles, Calif.

'31 CHRYSLER model D.D. convertible coupe; 6 wire wheels, rebuilt engine, good paint and top. \$350. W. R. Johnson, R.F.D. West Kingston, R.I.

'48 LINCOLN CONTINENTAL, completely original, 65,000 miles; engine just overhauled, black, no dents, excellent uph., near new whitewalls. \$1500. Perry Johnson, 1331 Cherry, Kansas City, Mo.

'40 PACKARD Super, 148-in. wheelbase, Bowman-Schwartz custom club convert., leather uph., good running condition. Beautiful classic. Pias 35c. \$1250 or best offer. C. W. Durham, 4010 E. 3rd St., Long Beach 14, Calif.

'37 PACKARD Super 8 conv. coupe, restorable condition, good top and engine. \$150. G. G. Marshman, Byron, Ontario.

'30 PACKARD Super 8 conv. sedan; Dietrich aluminum body, black leather, rear windshield, four speeds, wire wheels, side mounts. Deliver 500 miles. Pias. 25c. Best offer. Donald Foster, 530 Beacon St., Boston, Mass.

WANTED

CATALOGS, all makes. About 4 lists issued in 1955. Send \$1 for 1955 lists. Refundable on first 500 orders or more. Geraty, 7A Westway, Raynes Park, London S.W. 20, England.

'54 PACKARD engine manual, 12-cyl. Wish to purchase or borrow for copy. Dr. R. E. Bass, Chadbourne, N.C.

DAVIS 3-wheeled car in good condition. E. L. Bates, 1306 McKay Tower, Grand Rapids, Mich.

SELL OR SWAP

'36 FORD street roadster; immaculate shape and appearance; 1954 Special Award Winner. Indy Custom Auto Show; 3/4-race motor, all chrome; \$1500 or trade. Alex Shamka, 2816 Inland Dr., Middletown, Ohio.



Close-up of AIR LIFTS Saving Your Life

You didn't expect the turn. You cut the wheel — hard — and centrifugal force tries to hurl you down the embankment. Your AIR LIFTS Pneumatic Spring Boosters absorb the stress and hold you on the road.

AIR LIFTS slip inside coil springs and inflate with air to cushion and support spring action for a smoother, safer ride. You don't sway or lean so much on curves or "dip" on hard stops. They also take bumps from the road and cut tire and repair bills. They're simple to install and factory guaranteed. See your favorite dealer or write for details, specifying make and model of car. Write Dept. 51

FREE — Ask for How to Stop Front End Troubles folder.

AIR LIFT COMPANY, 2330 W. Main Street, Lansing, Mich.

Air Lift in normal riding position.

Air Lift absorbing stress of curve.



BUILD AT HOME either of these all metal custom sports car bodies on '33 to '40 stock Ford chassis for less than \$100!

Professional looking cars engineered for the amateur builder. Suitable for sports or daily use.

No welding and no die or hammer forming of metal. Need only hand tools such as hammer, hacksaw, etc. Complete step-by-step plans covering both cars just \$5.00 (top construction plans included).

Pre-fab kits available at low cost

(list sent with plans)

R. E. Whitehead

10 Pembroke Drive
Kenilworth, N.J.



some welding required on this model

EASTERN'S XMAS GIFT TO YOU
FREE POSTAGE
1 Free postage anywhere in U.S. We'll mail it no cost to you.
2 All items gift wrapped — FREE of charge.
3 We'll enclose a gift card with your name pre-addressed — no repacking.

Give your friends the thrill of receiving a gift direct from the Golden State. Super Service—just state "Christmas Gift" & we'll have it on the way, without delay. Christmas free postage offer expires Dec. 25, 1954.

CUSTOM GRILLE BAR
1953 Ford
\$750

The finest single improvement in customizing your car. Gives that massive look. Rich chrome on 20 ga. steel.

DUAL AERIAL KIT
\$85
Complete One for each rear fender. 3 section, adjustable, beautifully chromed. Both aerials work with a dual 15' lead wire for custom rear mounting.

CUSTOM STEERING WHEEL
'49-'54 Ford \$19.95
'52-'48 Ford \$21.95
'39-'48 Merc \$21.95
Solid plastic, 2-tone B&W. No chip, peel. Chrome ring.

CUSTOM CATALOG
New accessories, new low prices. Complete Catalog, just 25c.

TEARDROP SPOTLIGHT
\$15.95
Custom car owners prefer this beautiful torpedo design. Push button switch, 360° turn. Richly chrome plated.

"CADDY" HEADLIGHT RIMS
Beautifully chromed. Replaces old rims. \$6.95 pr. Fits Chev. '42-'54, Ply. '49-'54, Buick '49-'52, Dodge '48-'54, Olds '47-'53, Pontiac '48-'52, Ford '48-'53, Merc. '49-'51, Cad. '50-'53.

Freight prepaid only if order paid in advance, in full. Otherwise 25% deposit on all orders, FOB Los Angeles. Add 3% sales tax in Calif.

EASTERN AUTO

3319 MT-1 So. Grand Ave., Los Angeles 7, Calif.

Would You Like to Make \$1,000 A MONTH?

That's what Stanley Hyman made selling the amazing new PRESTO Fire Extinguisher!



STANLEY HYMAN

A MAZING new kind of fire extinguisher. Tiny "Presto" (about size of a flashlight!) does job of bulky extinguishers that cost 4 times as much, are 5 times as heavy. Ends fires fast as 2 seconds. Fits in palm of hand. Never corrodes. Guaranteed for 20 years! Sells for only \$3.98! Show it to civil defense workers, owners of homes, cars, boats, farms, etc., and to stores for resale—make good income. H. J. Kert reports \$20 a day. C. Kama, \$1,000 a month. Write for FREE Sales Kit. No obligation. (If you want a regular Presto to use as a demonstrator, send \$2.50. Money back if you wish.)



Science's MERLITE INDUSTRIES, Dept. 1421
New Midget 114 East 32nd St., New York 16, N. Y.
Miracle—In Canada: Mops Co., Ltd., 371 Dowd St.,
"PRESTO" Montreal 1, P. Q.

CUSTOM CLUB PLATES

FREE

How to form your own club literature



FREE

Specs—prices—how to order—design ideas

Sample of our own club plate available to Shell Decal Club Members. To customers, only \$5, postpaid.

Identify your club or auto group with our custom-made plates. Not painted tin or mass-stamped imitations with cartoon and funny paper symbols but heavy cast aluminum. Distinctive designs on a highly polished surface.

Send today for free club plate and year-end special sales listing.

SHELL • SPEED AND PHONE
MUFFLER SHOP AR 7-8283
11726 Wilshire Blvd., Los Angeles 25, California

BIGGEST SELECTION

FOREIGN CAR PARTS

FOR ALL MAKES

including

BRITISH FORD • BRITISH NASH
• GERMAN FORD

IN STOCK

New Illustrated Catalog on Request

Columbia Motor Co.

245 W. 56th St., New York 19, N. Y.

GOVERNMENT 40 ACRE OIL LEASE \$100.

Fortunes are being made by Citizens obtaining govt. leases & letting Oil Co's. drill. Free Info. & Maps of booming areas. Write:

NORTH AMERICAN OIL SURVEYS—C
8272 SUNSET BLVD., LOS ANGELES 40, CALIF.
LICENSED AND BONDED BROKERS

GREATEST INVENTION EVER!

For winter-cold cars
MOR-HEAT

Opens up sluggish car heaters and restores "new car" heater efficiency. Use all winter in anti-freeze. Nothing else like it! Send only \$1.98 for trial kit. Satisfaction guaranteed or money back!

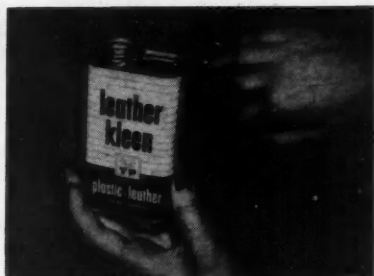
WONG LABORATORIES
3250 Madison Rd., Cincinnati 9, Ohio

name _____

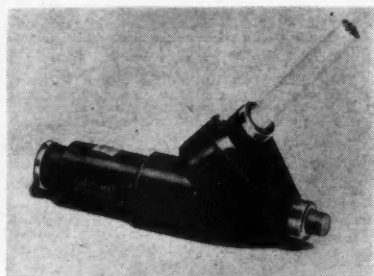
address _____

city-state _____

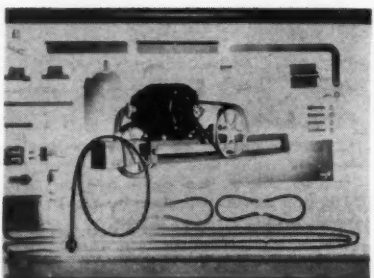
Motoring Trends



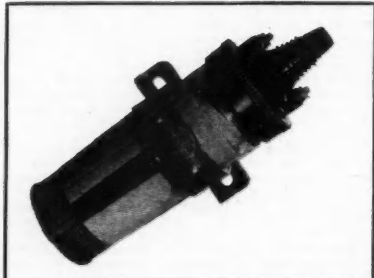
LEATHER KLEEN cleans, conditions, and protects all plastic and leather articles in one easy operation. Replaces natural oils lost through exposure to the elements. For auto upholstery, luggage, or shoes and leather wearing apparel. Priced from 98 cents; comes in eight- or 16-ounce and gallon quantities. At Firestone, Western Auto, Chris-Craft dealers, other stores.



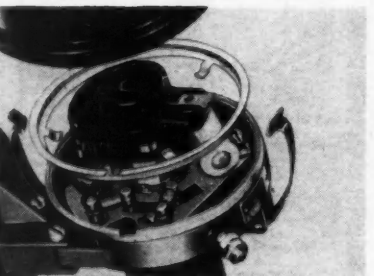
DRIVING SAFETY and Cig-O-Mat go hand-in-hand. This automatic lighter will light a cigarette and take a puff on it for you at the touch of a button. No complicated installation—just plug it into your present lighter socket. Priced at \$1.69, or \$1.79 west of the Rockies, postpaid. For six-volt systems only. Order it from Skibby's, 3463 S. 12th St., Milwaukee 15, Wis.



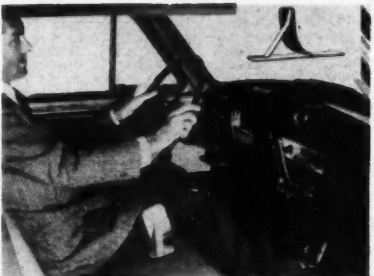
A **WRENCH**, pliers, screwdriver, and a free afternoon are all that's needed to install this low-cost, do-it-yourself, automatic garage door opener. A key control unit mounted in a steel post can be set anywhere in the driveway for in-a-car operation. Includes Westinghouse motor, Cutler-Hammer relays. \$69 from Bellford-Matic, Inc., 5900 Maurice Ave., Cleveland 27, Ohio.



HIGH-TENSION and primary windings of this high-voltage coil are oil-insulated and oil-cooled, designed to give your car better starting and acceleration, steadier performance under load. Output is 28,000 to 30,000 volts. In six- or 12-volt models, \$19.95. Oil-immersed home battery charger, also \$19.95. Paul D. Rosenthal Co., 320 S. Swall Dr., Los Angeles 48, Calif.

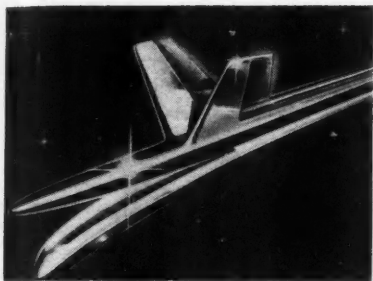


DESIGNED TO ELIMINATE vibration and distributor plate flutter, the StaFlex breaker plate stabilizer provides constant cam angle over the entire operating range without causing drag. Installed in 30 seconds. For Ford products, '49 to '54. Price, 95 cents at auto supply stores everywhere, or write directly to the S & B Distributing Corp., P.O. Box 4467, Detroit 28, Mich.

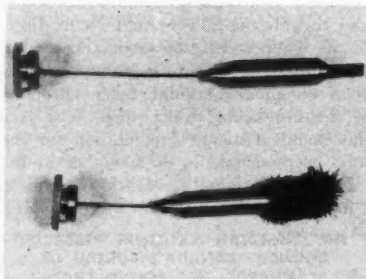


DO YOU HAVE "Accelerator Leg"? That's the fatigue in legs and back caused by long hours behind the wheel. "Leg Rest," a steel-and-rubber support between the leg and car seat, provides proper posture, eases calf, thigh, and back strain, slips easily into place. Price is \$3.98 postpaid. Write to The Leg Rest Co., 514 Shore Rd., Long Beach, N.Y., for further information on this new comfort device.

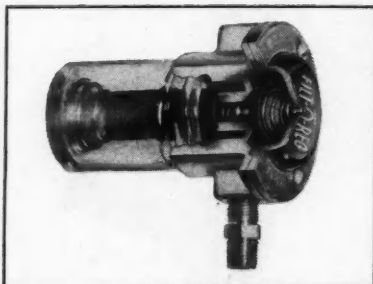
This department is not composed of paid advertising. All items are guaranteed by the manufacturer for immediate refund if you are not satisfied. Claims made herein are those of the manufacturer, and do not constitute an endorsement by Motor Trend. When ordering, include sales tax if required by your state.



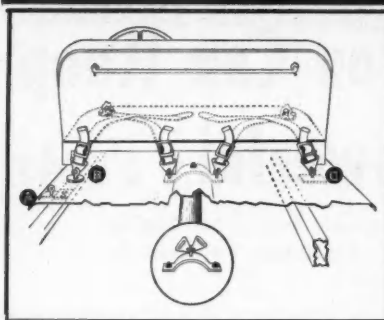
UNIQUE DESIGN of the futuristic "Rocket" hood ornament allows illumination through thin plastic wing edges of gold-amber color. Made of heavily chromed parts, the new hood ornament is styled to give both new and old cars a more streamlined appearance. Easily installed, the Rocket ornament sells for \$6.95 from Helm Accessories, Inc., 5944 Casmere, Detroit, Mich.



A **POWERFUL** Alnico magnet not only holds the Magnico Oil Plug firmly to the bottom of the oil pan, but attracts foreign metallic matter present in the pan. The clean plug at top shows neutralizer at tip of plug, which is designed to kill harmful acids. Specify make of car when ordering. Price, \$2.95 postpaid. Deloyl Mfg. Co., 321 E. Camino Real, Monrovia, Calif.



THE FILTO-REG, a combination fuel filter and fuel pressure regulator, supplies your carburetor with filtered fuel at a constant two pounds pressure. It relieves pulsation at the carburetor, stops flooding, hard starting, and fuel waste. For gasoline, alcohol, other fuels. Standard model, \$7.95, chromed, \$9.95. Bell Auto Parts, Inc., 3633 East Gage Ave., Bell, Calif.

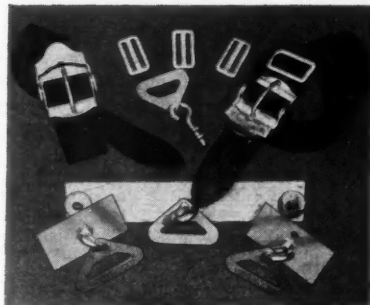


**In Case of Accident
PLEASE KEEP
YOUR SEAT!
HERE'S SUMAR'S
SAFE-SURE WAY**

You Can't Make a Better Buy... To Save Your Life!

SUMAR'S "Auto-Aero" SAFETY SEAT BELTS with patented "Tog-L-Lok" buckle. Complete with all tie-down hardware and fittings... Plus, simple instructions.

Made to aircraft specs, engineered for your car. Five colors, Gray, Tan, Green, Blue or Maroon.



POSTPAID IN USA

\$16.95

WRITE
FOR
FREE
CATALOG
TO...

SUMAR SPEED EQUIPMENT

PHONE C-8174

109 NORTH 7th STREET

DEPT. M

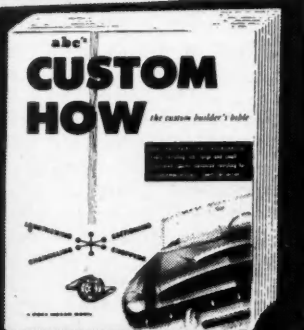
TERRE HAUTE, INDIANA

SEX APPEAL FOR YOUR CAR'S
BODILY FORM

GRAPHICALLY ILLUSTRATED
STEP-BY-STEP SCALE DETAILS

**COMPLETE AS KINSEY
AND TWICE AS USEFUL!**

FULL CHAPTERS prepared by experts, on: chopping tops (both regular and hardtop), sectioning, channeling, deck extending, body shortening, building padded tops, hole filling, leading, grilles, headlamps, air scoops, interiors, tail lights, decks, sunken continental spares, making seat covers, sports car restyling, building sports models, specific restyling for all current models, and much more.



\$3
postage
included

fat as a 'phone book

helpful as a blueprint

CUSTOM HOW
100% BRAND NEW

Send for **HOW NOW!** \$3 postpaid, shipped in a corrugated box. Please, no C.O.D. requests; satisfaction guaranteed or money back. Simply print your name and address clearly in the margin, clip this ad to your remittance, and mail them to: Post Publications, Box 897, Arcadia 28, California.

DON'T MISS JANUARY

HOT ROD

ON SALE NOW!

- See the exciting photo story of Jack Webb as Sgt. Joe Friday "dragnetting" it out on the hottest hot rod story of the year! Plus many other interesting articles and features!

(ADVERTISEMENT)

Here's How You Can Keep Your Engine Young and Powerful . . . As Long as You Want!

You can get top power and performance from your engine almost indefinitely and the way is so simple you will be amazed no one thought of it before!

EVER since the automobile replaced the horse and buggy, engineers have been at work trying to produce an engine that will last as long as the car. The problem seemed an impossible one until attacked from a new angle. Engineers and mechanics have come to realize that the engine's greatest enemy are corrosive compounds that tear down the motor. What are these corrosive agents? They include sulfuric acid, hydrogen bromide, carbonic acid and other metal-eaters which are formed in the engine as the result of fuel combustion. These acids and water are an inescapable part of the combustion process and cannot be eliminated. While these agents remain in the engine, your car is slowly but surely destroying itself with every mile you drive.

John Bentley, famous racing driver and magazine editor, commented on the harmful effects of acid in a recent article in his magazine. Bentley said: "It is a demonstrable fact that the greatest enemy of your engine—the most damaging single influence constantly at work in shortening its life and lowering its efficiency—is acid. This acid does not come from the lubricating oil, but from the gasoline burned. In other words, it is an inevitable product of combustion."

Auto expert Bentley went on to explain there are some six pounds of sulfur—enough to produce five gallons of strong sulfuric acid—in every 1,000 gallons of gasoline. We might say the average motorist uses 1,000 gallons of gasoline, probably more, in his car every year. That means he is pouring five gallons of metal-eating acid into his engine every 12 months. In addition, leaded gasolines contain appreciable quantities of bromine and chlorine which are turned into harmful hydrogen bromide and hydrogen chloride during combustion. Theoretically, the products of combustion in your car's engine are enough to form a pint of acid during each day's long run.

New alkaline oils have some effect against the damaging acid action, but only while the oil is new. Furthermore, in the upper cylinder region where there is very little oil circulation, the alkaline reserves are completely used up in a short time. With water condensing in relatively large amounts in this area, the upper cylinder region makes a perfect acid "still." To combat this acid forma-

tion requires a stronger and more effective agent than alkaline oils can supply.

TESTS BEGIN IN 1940

It did not take an engineer to diagnose the fact that metal-eating acids will quickly destroy an auto engine, but an engineer and the situation just happened to come together at the right time to solve the problem of how to rid the engine of the harmful agents. The engineer was Winthrop A. Johns. Win, as he is called, was doing experimental work on Diesel aircraft engines when he became interested in the engine-wear problem. Back in 1940, Mr. Johns was carrying out high temperature test runs on an experimental Diesel aircraft engine to check piston ring and bearing wear. With the Prestone coolant at 250 degrees F., he expected some breakdown in the lubricating oil, but in this he was agreeably surprised. The oil stood up under the extreme conditions and the Diesel went on humming. Mr. Johns could not explain the strange events, but decided to look into the unusual occurrence. He already knew, of course, all about corrosive effects on internal combustion engines and realized he might be working towards the answer to the corrosive acids problem. In reviewing his Diesel experiments, the Dunellen, N.J., engineer came to realize that with crankcase temperature above the dew-point of the blow-by gases, little or no water could condense. Without the presence of water there was less corrosion and yet, obviously, condensed water in itself has no power to harm engine metals. Therefore, he concluded, the condensed water coupled with the blow-by acid gases must be doing the damage.

Experimenting in his own laboratory and using his own car, a 1940 Ford V8, as a test vehicle, Mr. Johns soon established a plan of action. An alkaline substance was needed in the engine to neutralize the harmful effect of the acids. The principle was simple. Acids would attack the alkaline substance and be "neutralized" or destroyed. Early experiments to neutralize engine acids were conducted using caustic potash or potassium hydroxide. Although this neutralizing agent successfully performed its intended job of dealing with the destructive acids, it was rejected because it was found to be too harsh and dangerous to handle safely.

Mr. Johns next chose a magnesium al-

**AN AMAZING OFFER AND GUARANTEE
BY WINTHROP A. JOHNS**



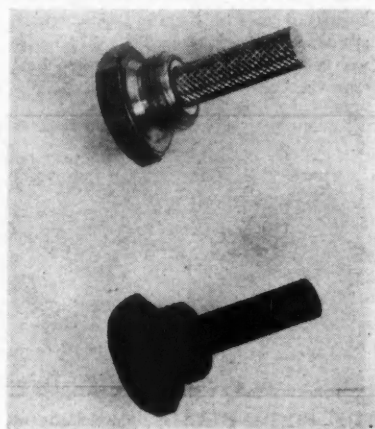
Mr. Winthrop A. Johns, mechanical engineer (M.I.T.) and member of the Society of Automotive Engineers, who has discovered a method of combatting engine acids by means of a magnesium alloy neutralizing device

loy as a neutralizing agent. The result was the Magna-Power Acid Neutralizer. In its final form, the neutralizer plug was a piece of magnesium alloy—actually a chemical in solid form—attached to the crankcase drain plug. Why was the chemical magnesium chosen for the job? A report made by scientists at the Canadian National Research Council in Ottawa shows the wisdom of the choice.

THE CANADIAN NATIONAL RESEARCH COUNCIL (CANADA'S BUREAU OF STANDARDS) HAS FOUND THAT:

"Adding certain metals or chemicals to automobile oil will greatly extend its useful life.

Before and After—125,000 Miles



Pat. applied for

Before and after series demonstrates acid action on a Magna-Power plug taken from a Studebaker Six after 125,000 miles. Corroded plug was obtained from one of a fleet of hard driven dairy trucks used in a Magna-Power control test. Test proved conclusively that Magna-Power slows corrosive acid action, lowers oil consumption and improves engine efficiency.

Motor Trend

(ADVERTISEMENT)

"To the motorist this means that he may be able to drive for 7,000 miles or more without changing oil, instead of the usual 1,000 or 2,000 miles.

"Several years of laboratory work has shown that the metals Lithium, Potassium, Sodium and Magnesium or some of their salts or oxides slow down the oxidation that destroys and contaminates the motor oil. Good results were shown on two test vehicles.

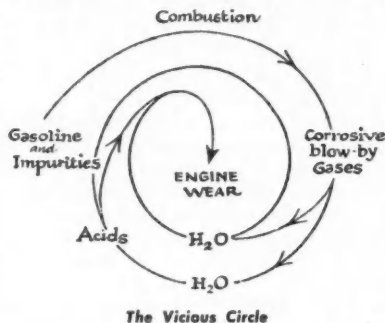
"The National Research Council suggests that a piece of one of the metals could be placed in direct contact with the engine oil by attaching it to the car's oil drain plug . . ."

In other words, the basic idea behind Magna-Power's extraordinary performance is that corrosive acids attack some metals more readily than others. A magnesium-aluminum alloy was found to be highly susceptible to attack by corrosive acids. Therefore, it acts as a sacrifice and inhibitor in protecting the working parts and oil of your engine. Furthermore, there is conclusive evidence that the Magna-Power will not increase alkalinity in oil. Rather, it tends to sustain and fortify the alkaline factors already in the oil.

BREAKING THE CIRCLE

Acids normally formed through combustion are not only strong, but very thirsty. Sulfur trioxide, for example, will hold water until boiling at over 500 degrees F. Therefore, the acids cannot be removed by heat, filtration or any of the normal processes. To make the situation

more serious, the formation of acid rapidly becomes self-accelerating. The acids draw water that draws more acids that draw more water. The easiest way to stop this damaging circle is to destroy the acid through the use of a magnesium alloy. When the acid is destroyed by the alloy, water is no longer held and without water the acids cannot grow. Thus, through the use of a magnesium alloy plug, the vicious circle is interrupted.

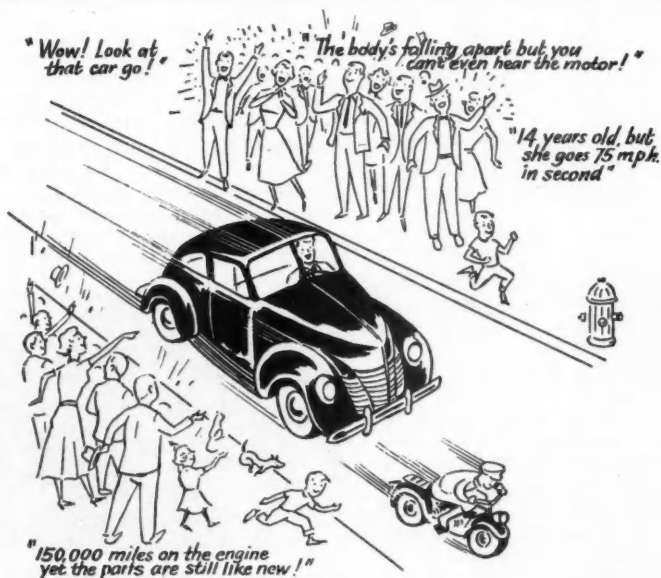


Before we discuss the damage done to your car by corrosive acids, let's examine the role that friction—your engine's scapegoat—plays in wearing down your automobile's life. To make it short and sweet, as any engineer can tell you, friction has little harmful effect on your automobile. The problem of friction-wear in present day automobiles has been licked through the great engineering advances made during the past 50 years.

Metal rubbing against metal can be damaging, but today's vehicles are constructed to cut harmful friction to a bare minimum.

What about the friction areas that still remain in every auto engine? In almost all instances, these areas are protected by lubrication. This protection is easy to understand as it is accomplished by providing a slippery film of oil between metals in extremely close operational contact. The combination of modern engineering and high quality lubricants leaves corrosive acids as the final dangerous threat to the life of your engine.

One important point often overlooked in analyzing the results of wear on an engine is that the products of corrosion are themselves abrasives. For example, one end product of acid attack on iron is iron oxide, more widely known as rust. This rust, sold commercially as jewelers rouge, is formed in a raw state in your automobile engine, on the very surface you are trying to protect. Here is the beginning of another accelerating circle in the auto engine. Aluminum forms aluminum sulphates, oxides and carbonates, all of which form in tiny hard crystals with sharp edges. When these crystals break away from the surface they scratch and tear both the aluminum and the iron of the cylinder wall, setting both the metal and the abrasive free in the oil film causing further abrasive action. Thus in a normal engine it is impossible to separate the effects of friction or abrasive wear and those of acid corrosion since the one contributes to the other. When acids are eliminated, these secondary abrasives are also eliminated and another damaging cycle is interrupted.



As one Magna-Power fan wrote, I used to change the oil in my '46 Chevy every 1,500 miles. Between changes I would add two quarts of oil. That was before I invested \$2.95 in a Magna-Power acid neutralizer. Following the installation of Magna-Power, I was able to run my Chevy 7,000 miles—yes, 7,000 miles—before changing the oil. That means Magna-Power paid for itself three times over in that one instance. But that wasn't the end of my savings! During the 7,000 miles, I only had to add four quarts of oil. That meant an additional savings of four quarts of oil, considering the car's previous oil consumption. I tell all my friends to send \$2.95 to Johns Mfg. Co., Dunellen, N.J., for their Magna-Power Plug! More mileage between oil changes and less oil consumption mean dollars in my pocket.



Win Johns and the original test car.

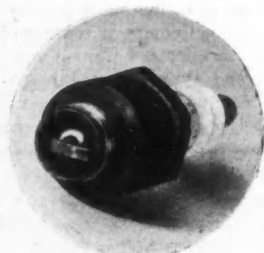
HERE ARE THE RESULTS

How would you like to drive a car 14 years—more than 150,000 miles—without an overhaul and then find the engine gives you more pick-up, more gas mileage and greater efficiency than when it was new. That is the case with Win Johns and his original test vehicle, a 1940 Ford V8. Here is a description of the test Ford taken from the May, 1954, issue of AUTO AGE. "... the engine is absolutely remarkable. It idles down to 125 rpm as smoothly and evenly as a turbine and in almost complete silence. Stopwatch tests show that it will accelerate from 10 to

(ADVERTISEMENT)

50 mph in 16 secs. and can cover a standing quarter mile in 21 secs. At 70 mph (on the speedometer) there is plenty of throttle left and an impression of liveliness. The Ford . . . was dismantled at 117,000 miles, when bore wear was found to average .00095 inches, or less than one thousandth of an inch. The reader may draw his own conclusions."

Another interesting point brought out in the magazine article was the condition of one set of spark-plugs used in the test vehicle. These spark plugs ran more than 61,000 miles—or two and one half times around the world. Four points were noticeable in a quick examination of the plugs, which, by the way, are still in functioning condition. First, these plugs, purchased in the early post war years, were not of a popular brand name. Secondly, the porcelain insulation on three of the plugs was almost entirely gone. The insulation was so far burned away that it was hard to understand how the plug could fire at all without constantly shorting across the interior. Thirdly, although the electrodes were worn rather thin, the spark plugs still performed evenly and without misfire. Finally, the plugs examined were almost entirely free from traces of carbon and an excellent mixture adjustment was indicated."



Actual photo of one of the spark plugs after 61,810 miles. Note good condition of electrodes.

Here is further proof of the effectiveness of Magna-Power. Magnesium plugs were installed on the engines of one half of a 30-vehicle milk delivery fleet back in 1949. The other 15 trucks were used as comparative control vehicles. The tests, which ran over a three-year period, covered more than two million miles of arduous stop-and-start service. What were the results of the fleet test? According to Mr. Edward L. Hark, garage superintendent of the Farmers and Consumers Dairy, Morristown, N.J., engine wear was reduced by 82 per cent on the trucks equipped with the magnesium plug. Additional benefits included better oil and gas mileage and longer spark plug life.

In inspecting two of the actual Studebaker engines used in the above test, certain factors were noticeable. One engine, an R15, had been fitted with the magnesium plug; the other, an M16, had not and therefore provided a valuable

means of comparison. The R15 engine broke a piston on June 15, 1952, after covering 125,000 miles. Unfortunately, the truck was driven eight miles with a loose connecting rod which ruptured one of the cylinder walls. Nevertheless, bore wear on the five measurable cylinders averaged .006 inches, giving a negligible wear of .00049 inches per 10,000 miles. The M16 "control" engine, running without magnesium protection for a distance of only 45,000 miles, showed bore wear of .015 inches. This is equivalent to a wear factor of .00331 inches per 10,000 miles or 6.8 times more rapid than that of the protected engine.

A further point of interest, according to Mr. Hark, is that while the R15 was run on premium grade lubricating oils, the control engine had the benefit of using only heavy duty alkaline detergent oil for added protection. In spite of this, the recorded rate of wear was 680 per cent more rapid than that of the engine with the magnesium acid neutralizer plug. Interestingly enough, the chart showing the effect of this plug on drain oil mineral acid indicates roughly 700 per cent more mineral (corrosive) acid formation in engines with the magnesium.

ENGINES WITHOUT MAGNA-POWER

Total Mileage	Wear (inches)	Wear Rate (micro-inches per 10,000 miles)
*45,052	.01492	3310
45,700	.01114	2440
30,886	.01192	3860
45,918	.01344	2830

ENGINES WITH MAGNA-POWER

Total Mileage	Wear (inches)	Wear Rate (micro-inches per 10,000 miles)
*125,482	.00606	485
65,321	.00284	437
25,712	.00218	848
45,117	.00333	740

(*These engines were taken from the same truck used by the same driver on the same run.)

Conducted under normal operating conditions over a three-year period, this test proves the tremendous reduction in wear made possible by the use of the magnesium alloy acid neutralizer.

A more recent independent test is highly indicative of the acid neutralizer's effectiveness in reducing engine varnish and sludge formation. J. A. Milteer of Quitman, Ga., removed the magnesium plug from his 1953 Ford 6 at a regular oil change on May 11th, 1954. Shell X-100 #20W was put into the engine. On June 13th, after driving 2,657 miles without adding oil, Mr. Milteer changed his oil and reinstalled the Magna-Power. Again Shell X-100 #20 was used. A sample of the oil drained from the Ford 6 was immediately forwarded to the Southern Analytical Laboratory in Jacksonville, Fla. Meanwhile, the engine was used until July 10th to cover 2,700 miles. At this time the oil was drained and another sample sent to Southern.

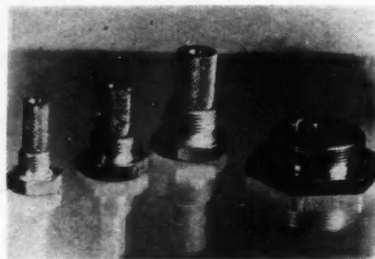
The most significant part of the report issued by Southern is the great difference in sludge and resin in the Magna-Power oil. There was approximately

1700% more sludge in the oil that had not been affected by the magnesium alloy plug than the oil used with Magna-Power. Here are the actual figures as presented by the Southern Analytical Laboratory in their reports #36280 and #36333:

	With Magna-Power	Without Magna-Power
Sludge:	0.3%	5%
Resins and Gum:	None	0.5%
Sugars (reducing substances):	Trace	Present

REGULAR GAS IN HIGH COMPRESSION ENGINES

Added to Magna-Power's startling performances is a new report from the Johns Manufacturing Company. Automobiles with high compression engines, such as Buick, Oldsmobile and Cadillac, may soon be using less expensive regular gasoline while continuing to perform at peak efficiency. Mr. Johns announced recently that "regular" gasoline has been used successfully in high compression engines when a magnesium plug is attached to the car's oil drain pan. According to the Dunellen engineer, independent experiments offer a heavy margin of evidence in favor of the new development. This parallels recent findings of many oil companies that oil additives strongly affect spark plug life and combustion efficiency. In three high compression automobiles now under observation, engine performance remained at the same level following a switch to "regular" gasoline. All three automobiles were equipped with the inexpensive Magna-Power magnesium plug. Commenting on the newest development in the Magna-Power laboratories, Mr. Johns said: "Conclusive proof that regular grade gasoline can be used in high compression engines effectively has not yet been found, but every indication in preliminary tests points toward this end. Once proven, this new use of the magnesium acid neutralizer will result in enormous savings to every owner of a heavy automobile. The important point



Shown above are four of the many types of Magna-Power acid neutralizer plugs. These plugs are designed to fit every American-made automobile, popular foreign makes and leading sports cars. There is one to fit your car.

to remember is that the less expensive grade of gasoline may be used while the vehicle continues to operate at peak efficiency."

Motor Trend

(ADVERTISEMENT)

Here are the **ANSWERS** to some of the **QUESTIONS** you may have:

How soon can I notice a difference in my engine after I install Magna-Power?

The oil shows cleaner even after the first 1,000 miles and by the time you reach 5,000 miles there will be a noticeable increase in power. The best way to measure that is to time the acceleration from 10 to 50 mph over the same road in the same direction and under the same weather conditions. Do this now before you install a Magna-Power, then later you can check and compare.

Is there any cost involved in installing Magna-Power in my car?

None at all. The next time you have your oil changed, replace the oil drain plug with Magna-Power, the magnesium acid neutralizer plug. Your mechanic will do it at no extra charge to you and with no bother to himself.

Will the Magna-Power plug show signs of "wear"?

The magnesium acid neutralizer plug will show signs of "wear" probably after several thousand miles (see photo on first page, "Before and After"). Although there is not a direct ratio between wear and effectiveness, the corroded surface of the magnesium alloy is an indication that acids have turned their attention from engine metals to your Magna-Power. That is why the magnesium alloy is called a "sacrifice" metal—it is slowly destroyed by corrosive acids while protecting the engine. Remember, though, Magna-Power will still last your car for 100,000 driving miles.

My car has already gone 55,000 miles. Will Magna-Power help it?

Our tests indicate that if a passenger car engine uses less than a quart of oil each 500 miles then the Magna-Power



WHAT MAGNA-POWER USERS WRITE:

I had one of your plugs in my '41 Buick Special for about 5,000 miles. Thereafter, the oil mileage increased from 700 miles per quart to 1,500! Since nothing else, including driving habits, had changed I must conclude that Magna-Power was responsible. I don't see how this could happen, but cannot refute the testimony of my dipstick. —H.H.L., Fairborn, Ohio

Over a year ago I installed Magna-Power in my '52 Packard 300. Now, 8,000 miles later, it purrs like a big tomcat. Unfortunately, I had to have the valves ground, but I believe this was caused by the re-refined oil I was using which I found to contain a 15% asphalt base.

I'm back on detergent oil again since the valve grind and everyone remarks how quiet the motor is. The mechanic who did the work is a Packard specialist and he informed me he had never seen so clean a motor. Even the hydraulic lifters didn't need to be cleaned. I've used many additives, but never have I experienced this case before. There can be but one answer—Magna-Power.

If I have as good luck with my Packard as you did with your Ford, I shall have to change my will to include my car and give it to my grandchildren. —T.E.C., Seattle 3, Wash.

I am desirous of procuring another Magna-Power acid neutralizer for a 1954 Ford six cylinder. I have used one in my Nash for about three years with excellent results. The car has been driven 44,000 miles and the head has never been off. Power has not decreased and spark plug life has been considerably extended. I am forwarding a check for \$2.95 to cover cost of the new Magna-Power. —A.W.D., Chappaqua, N.Y.

Very well satisfied with plug on my 1954 Lincoln Capri. Was surprised with the color of the oil after 2,000 miles of hard driving.

—A.L.L., Monroe, Mich.

I am using one of your Magna-Power acid neutralizers in my '53 Chevrolet. I have about 15,000 miles on the car—around 10,000 since installing your drain plug. The motor performs beautifully; original plugs (Champion) show only a slight deterioration of the insulator ends. I add about a quart of oil between changes. Recently I drove the car non-stop for 24 hours at about 50 mph and had to replace only one pint of oil. —J.A.M., Belmont, Calif.

I am very anxious to install this new plug as I had one on my 1951 Plymouth which was traded in at 39,000 miles and the motor was in better condition than when it was purchased new. —H.P.C., Mt. Ephraim, N.J.

On Aug. of 1952 I purchased a Magna-Power Acid Neutralizer auto crankcase drain plug for my 1949 DeSoto car. I used this for some 25,000 miles with remarkable results:—1. Much more power and pep. 2. Better mileage on both oil and gas. 3. Remarkable spark plug life. Actually my car had more "get-up-and-go" at 46,000 miles than it had at 5,000 miles. I attribute it all to the plug I purchased from you people. I actually sold my car for over twice its retail value, just because of the pep and snap it actually had. —R.F.M., Ashland, Ohio

In April, I purchased a "Magna-Power" plug for my 1951 Buick. It has lived up to the things you said it would. Now I would like to purchase one for my other car. Enclosed find check for \$2.95 for one "Magna-Power" plug for my 1953 Chevrolet Station Wagon, Series No. 150. —K.H.B., Middlebury, Conn.

Just traded in my 1951 Mercury—used your Magna-Power for 28,000 miles. Car has as much power as when new—and is using no oil. Think your product must have helped a lot since much of this mileage was city stop and go driving. Please hurry the new unit and thanks a lot. —H.E.G., Indianapolis, Ind.

I have installed the Magna-Power acid neutralizer on several cars, some with as many as 10,000 miles on them.

In each case, I have found evidence of increased performance. However, the more noticeable has been the decreased amount of servicing required. The spark plugs have longer service periods, and the crankcase oil seems to stay free from sludge for longer periods.

The compression tests made on these cars have either remained the same or have increased over periods of use of approximately 20,000 miles.

The mileage per gallon of gas has not decreased, and the oil consumption has not increased. These are real indications of better economy.

From these indications, it may then be concluded that the Magna-Power acid neutralizer does the job that you claim it can do.

—J.K., Nixon, N.J.

will help. Beyond that it may help, but controlled tests have not yet been conducted to give conclusive proof.

What is the effect on oil change periods and filter life?

We find that in passenger car service 4,000 mile oil changes are adequate and even then there is some doubt about the necessity of change. Filter cartridge life doubles or triples due to the decreased amounts of sludge and resins formed; they are good for 12,000 or even 16,000 miles.

OUR WAY OF DOING BUSINESS

Fill out the coupon at the bottom of this page and mail it to us today. Your Magna-Power is shipped to you as soon as your order is received. There is no long delay, no long wait to protect your car with Magna-Power. Have the Magna-Power neutralizer plug installed in your oil drain pan at your next oil change, then see the difference in your automobile.

Buy Magna-Power . . . try Magna-Power . . . and if you are not completely satisfied, your money will be quickly refunded. You cannot lose with Magna-Power!

EXPERIMENT WITH THE MAGNA-POWER NEUTRALIZER AT OUR RISK

If you are not satisfied with the way it works, send it back, at any time (years from now, if you choose), for an immediate refund.

Canadian orders filled from Toronto stock (add 10% sales tax). Canadian checks, money orders or cash accepted.—Available for foreign and U.S. passenger cars, trucks, buses, tractors and many other engines. Indicate year and make of vehicle with all orders.

JOHNS MFG. CO., Dept. 4-M, Dunellen, N.J.

My car is a . . . (make) . . . (year). Please send me, postpaid, a MAGNA-POWER acid neutralizer. I enclose \$2.95. I understand that it is sold with an unconditional guarantee of satisfaction or my money back!

Name

Street

City State

INDEX TO ADVERTISERS

Abbott-Kiple	18
Air Lift Company	67
Almquist Engineering Company	56
Autocessories, Ltd.	4
Auto Discount Company	59
B & B Specialties	50
Bay State Automotive	19
Bell Auto Parts, Inc.	66
Cal Van	64
Columbia Motors	68
Curran Corporation	56
Eastern Auto	67
Eeloyl Company	50
Engine Products Mfg. Company	63
Four-Way Welder Co.	66
Frank Morgan	66
Gale Hall Engineering Inc.	47
Honest Charley	66
JSM Products Co.	56
Johns Mfg. Co.	70, 71, 72, 73
K.C. Card Company	50
Kozak	51
Larchmont Travel Service	18
Larry & Luckey Customizing	66
Life Long Battery	7
Mallory Electric Corp.	3
Mammoth Sales Company	56
Maximoff Research Company	50
McBar Machine Shop	56
Merlite Industries	68
Micro Bronze Filter Corp.	21
Motor Book Dept.	Front inside cover
National Schools	6
New England Surplus Sales	8
Newhouse Automotive Industries	57
Newhouse Mailmart	49
North American Airlines	5
North American Oil Surveys	68
Northrop Aeronautical Institute	20
Offenhaus Equipment Corp.	66
Post Motor Books	69
Seyco Corporation	65
Shell Speed & Muffler Shop	68
Snap-On Tool Corporation	20
Southern California Muffler Corp.	9
Sumar Speed Equipment	69
Tanner Products Corporation	18
Utilities Engineering Institute	18
Warn Mfg. Company	64
Wayne Schools	66
R. E. Whitehead	67
J. C. Whitney	Back outside cover
Wong Laboratories	68

Classic Comments

(Continued from page 62)

QUESTION—I purchased a 1930 LaSalle seven-passenger touring car for \$50. Should I continue to work on it or is it a waste of time and money?

Edward Rumrill
North Springfield, Vt.

ANSWER—Although not a true classic, this special interest car can be restored without too great an expenditure. Continue working on it.

QUESTION—Will you kindly give me some information on a 1934 Pierce-Arrow straight-eight four-door sedan? The things I would like to know are the bore, the stroke, the displacement, type of brakes, horsepower, wheelbase, and weight.

Walter Molak, D.D.S.
Pawtucket, R.I.

ANSWER—It is impossible to answer your questions without additional information, because three different series of eight-cylinder Pierces were manufactured in 1934. One had a 3½-by-5-inch engine, the other a 3½-by-4¾-inch engine. Four-door sedans were built on 139- and 144-inch wheelbases. One series had mechanical brakes, the other Stewart-Warner power brakes. One series sold for \$2895 and weighed 4694 pounds; another sedan sold for \$2295.

QUESTION—I recently paid \$279 for a complete engine overhaul on my 1932 Auburn. The old bus runs fine but I think I was "taken" on the price. Do you agree?

Mitchell Hardy
Des Moines, Iowa

ANSWER—No, I don't! As the engine runs fine, you apparently got a good job. To have received a good job the mechanic must have known what he was doing. Many enthusiasts compare the overhaul price of a classic with the overhaul price of a modern Ford, Chevrolet, or Buick. This is unfair to the mechanic. The overhaul of a classic is a specialized time-consuming job and production short-cuts such as the replacement of worn accessories with exchange rebuilt parts cannot be made because of the lack of parts. In addition, a mechanic has to look up clearances and procedure on the old cars, whereas he already knows them for modern cars. Rotating parts have to be repaired, which often require a great deal of ingenuity. Even gaskets may have to be made, a simple but lengthy task. Consider the legitimate overhaul price of a Duesenberg engine as an example. Labor alone for a valve job is easily worth \$160. New timing chains cost \$90 and labor alone for the installation of rings is worth \$30. You weren't "taken." You paid a reasonable sum for an overhaul even if the engine was not bored or the crankshaft ground.

QUESTION—A local garage has a 1927 Stutz Roadster for sale for \$250. It is a Model AA powered by an eight-cylinder

engine with a single overhead camshaft and twin ignition. Is it worth the money? Is it a classic?

Robert Solomon
Newark, N. J.

ANSWER—The car is definitely classic. The AA was manufactured in 1926 and 1927 and was a popular car in its day. Upon its introduction, Stutz sales multiplied by five. If all parts of the car are there, it should easily be worth \$250. If major parts are missing or the body is chopped, give the purchase further consideration. Stutz parts are not easy to locate. The AA was introduced with Timken hydrostatic brakes. These brakes were not satisfactory and most cars were converted to Lockheed hydraulics. If the car still has the hydrostatics, the brake system cannot be restored because the rubber tubes and sacs are not available today. It could, of course, be converted to a hydraulic system, but you may find the cost to be somewhat prohibitive.

QUESTION—I am the owner of 11 classic cars. I have searched for many months for odd-size rubber moldings which fit around the windshields and windows and insulate against wind and air. Correspondence with major rubber companies and stores has not helped. What do you advise?

Harold Brunze
Philadelphia, Pa.

ANSWER—Classics utilized many sizes and shapes of pre-cut and molded rubber and rubber strips. These are not available today. Even when found the rubber is old, hard and useless. Many enthusiasts obtain a strip of rubber which is similar to the original and rework it to fit. Another solution is to obtain soft sponge-rubber strips and force them into the grooves and channels, where they expand and work satisfactorily. Another method is to cover rubber tubing with leather or a good grade of plastic and force it into place. This is undoubtedly more expensive initially but it is also a more permanent installation.

This letter will interest you:

Dear Bob:

I would like to point out several serious errors in the letter from Herbert P. Read (Nov. MT).

The first Studebaker President was actually a Commander "Big Six" seven-passenger sedan. Late in 1927 (I think it was) the eight-cylinder President line was introduced. The bore and stroke was 3½ by 4½ inches, not 3½ by 4¾, and there were five main bearings. The bore was enlarged ¼ inch for 1929, but the nine-main shaft was not adopted on the big 337-inch engine until 1932.

Mr. Read is correct in stating that the 4¾-inch- and 5-inch-stroke versions of the President Eight engine were applied to the Pierce-Arrow.

John Bond, Editor
Road & Track Magazine

Thank you for the additional information and your interest, John.

Motor Trend



more men will learn more about more cars in 1955 than ever before . . . thanks to Motor Trend magazine . . . truly, the car owners magazine!

HERE AT LAST!

a treasury of customizing ideas

- Customizing the easy way with bolt-ons
- The most popular re-styling simplified
- Metal working and painting instructions
- Basic methods of design engineering

Here are all the facts—how-to-do-it-yourself and save money, too. The most complete book on customizing ever published tells and shows, with many photos, just how to go about the customizing process that you select, from bolt-on modification down to real metal working projects. Most common modifications, how to do them, plus facts on special tools used in customizing and how to use them.



Restyling secrets from 100 cars!

Compiled by the editors of Hot Rod, Motor Trend and Car Craft magazines

Other valuable TREND BOOKS now available

HOT ROD 1955 ANNUAL: Here's the new reference book with all the proven hot rod procedures clearly explained by the experts. Engine conversions, new equipment, added HP for your engine, building competition machines, specific building problems and their solutions. 144 fully illustrated pages.

PLASTIC CARS: The complete plastics building manual. How to easily design and build Fiberglass car bodies, boats, furniture, household products. All the current plastic production cars are shown in detail. Information on supply sources.

CLASSIC CARS & ANTIQUES: Learn the details on how to buy and restore vintage cars, antique car history, facts on the best classics, the development of the automobile. 144 pages include 225 photos of over 100 different makes.

WORLD WIDE AUTOMOTIVE YEAR BOOK: A compendium of every production car in the world with complete data on performance, price, construction details and factory history. Here are the facts on 271 different makes of cars with over 230 exciting photos.

Look for these popular Trend Books on your newsstand or use this handy coupon



MAIL THIS COUPON NOW

Trend Books
5959 Hollywood Blvd., Los Angeles 28, Calif.

Enclosed is \$.....for.....books at 85¢ each (includes postage and handling). \$1 in Canada.

- ☐ Custom Cars 1955 Annual ☐ Classic Cars & Antiques
☐ Hot Rod 1955 Annual ☐ World Wide Automotive Year Book
☐ Plastic Cars

name.....

address.....

city.....zone.....state.....

7
1
0

STO
AS!
atalog
uide
...
shipm
of in
esson
eng
cuse

Tod
si
copy
age
25¢
re: m
tail

16,

y!

most
west
ie on